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FORSYTH
TECHNICAL COMMUNITY COLLEGE

1997 - 1998
Catalog

General Catalog
1997-1998

FORSYTH
TECHNICAL COMMUNITY COLLEGE

Main Campus
2100 Silas Creek Parkway
Winston-Salem, North Carolina 27103-5197
(910) 723-0371

West Campus
1300 Bolton Street
Winston-Salem, North Carolina 27103-5197
(910) 760-2373

An Equal Opportunity Educational Institution

Dr. Desna L.Wallin, President

A MESSAGE FROM THE PRESIDENT

At Forsyth Technical Community College, your success is our goal. We are proud of the quality educational programs and services that we offer to you. Our small classes, professional faculty, and state-of-the-art equipment combine to provide an educational experience that will prepare you for the 21st century. The college is committed to providing quality educational experiences at a reasonable cost.
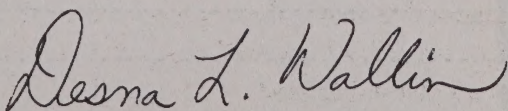
Our students are our most valuable resource here at Forsyth Technical Community College. Whether you are seeking a technical degree, planning to transfer to a four-year college or university, looking for vocational training, updating your current skills, or developing new capabilities, the faculty and staff are here to meet your needs.

With the change from the quarter to the semester system commencing this fall, we are positioned to assure a smooth transition from high school to the community college system and then forward to a four-year college or university. With flexible scheduling, telecourses, and on-line education through the internet, we are able to meet the diverse educational needs of adult learners who are balancing home, work, and family responsibilities while continuing their education.

In addition to the main campus on Silas Creek Parkway, Forsyth Technical Community College has a West Campus on Bolton Street, a center on 4th street downtown, a center in the 5th street public library, and over 40 other locations throughout Forsyth and Stokes counties to provide you with convenient access to educational programs. In addition, the college is currently constructing two major centers, one in Kernersville and one on Carver/Lansing Road, in order to provide additional options to serve our expanding student population.

We certainly hope you will choose to enroll at Forsyth Technical Community College. We believe you will have an enjoyable, challenging, and rewarding experience. I urge you to take full advantage of the best educational bargains in Winston-Salem and North Carolina. Our open-door policy and our helpful admissions counselors will assure you a smooth entry into the college.

Please feel free to contact any member of the college community to answer questions and provide you with assistance. I look forward to seeing you on the Forsyth Technical Community College Campus where your success is our goal!

Desna L. Wallin

Desna L. Wallin, Ed.D.
President

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General Information

Academic Calendar

Information subject to change without notice.

History

Forsyth Tech traces its beginning to early adult and high school vocational courses which were available in Winston-Salem. In 1958 a Chamber of Commerce study recommended that an Industrial Education Center be built to provide the trade and technical training needed by local industry. A bond issue provided the money to start construction of two buildings late in 1959 and the first adult classes were begun in October of 1960. In 1963 a third building was constructed and new technical programs were added. That same year, the North Carolina Legislature passed the Community College Act, creating a statewide system of community colleges, technical institutes, and industrial education centers. In January 1964 the name of the school was changed to Forsyth Technical Institute. The operation of the school was transferred from Winston-Salem/Forsyth County Schools to a local board of trustees to govern the Institute following policies established by the State Board of Education and the State Department of Community Colleges.

In 1984 a bond referendum provided funds for the acquisition of Dalton Junior High School, which became the Institute's West Campus, and for the construction of a high technology building, Hauser Hall. In July 1985 Forsyth Technical Institute became Forsyth Technical College. In December 1987 Forsyth Technical College became Forsyth Technical Community College. Changing to a community college made it possible to offer a college transfer curriculum, which began in the fall of 1989.

In 1991 Bob H. Greene Hall was completed and serves as a classroom facility for general education and continuing education courses. It also houses the ADN and PN curriculums.

In 1992 the Allman Center was completed and serves as a classroom facility as well as housing administrative and student services functions.

Today the college offers 39 associate degree curriculums, 20 diploma curriculums, and 12 certificate curriculums. The academic programs of the college are organized into five divisions: Arts and Sciences, Business Technologies, Engineering Technologies, Health Technologies and Corporate and Continuing Education. The physical plant includes 17 buildings with replacement value of $37 million. Over 5,100 curriculum students are enrolled and more than 7,000 students enroll each quarter in continuing education classes.

Forsyth Tech is an integral part of the growth and success of Forsyth and surrounding counties.

Mission

Forsyth Tech is a comprehensive community college offering lifelong learning and educational opportunities to improve the quality of life for all citizens.

AS AN OPEN DOOR COLLEGE FORSYTH TECH PROVIDES

ADULTS OPPORTUNITIES FOR

DEVELOPMENT,

EDUCATION, WORKFORCE

PREPAREDNESS, AND

TRAINING FOR A USEFUL AND PRODUCTIVE LIFE.

Purpose

Forsyth Tech is dedicated to providing these opportunities through education and training in college transfer, diploma, technical, and continuing education areas.

The purpose of Forsyth Tech is to provide:

- effective teaching and academic support services for adults.

- opportunities for adults who need to master basic education skills.

- vocational education and training for adults who are preparing to enter skilled trades.

- technical education and training for adults wishing to enter occupations in business, industry, and health services.

- technical, vocational, and self-improvement courses for adults.

- education for adults who wish to further their schooling at four-year institutions.

- employee training and retraining for business and industry in response to changing economic conditions.

Quality Principles

The college operates with commitment to two quality principles:

1. Constancy of purpose - fulfilling our mission.

2. Customer service and satisfaction.

FORSYTH
TECHNICAL COMMUNITY COLLEGE
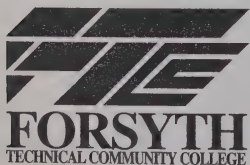
Equal Opportunity/ Affirmative Action

Discrimination

Forsyth Tech is an equal opportunity institution, in compliance and agreement with the provisions set forth in Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. No person shall be discriminated against on the basis of race, sex, religion, age, sexual orientation/preference, national origin, or disability, if otherwise qualified.

Applicants, employees, and students of Forsyth Tech may lodge grievances involving alleged violations of their rights under these provisions with the Equal Opportunity/Affirmative Action Officer at (919) 343-4261 or the Assistant Secretary, Office for Civil Rights, 330 C. Street S.W., Washington, D.C. 20202. Inquiries may be directed to the equal opportunity affirmative action officer for employees and the dean of Student Development Services for students at Forsyth Tech.

Auxiliary Aids for Students with Disabilities

No student with impaired sensory, manual, or speaking skills will be denied the benefits of, excluded from participation in, or otherwise subjected to discrimination under any education program or activity operated by Forsyth Tech because of the absence of educational auxiliary aids. Auxiliary aids include interpreters or other effective methods of making orally-delivered materials available to students with

hearing impairments; taped texts; readers for students with visual impairments; and other similar services and actions. Forsyth Tech will make every effort to provide auxiliary aids to students who require such assistance; however, Forsyth Tech is not required to and will not provide attendants, individually prescribed devices, readers for personal use or study, or other devices or services of a personal nature.

The student with a disability has the responsibility to notify the Testing/Special Services/ADA coordinator of the need for educational auxiliary aids such as interpreters. The disabled student is required to notify the coordinator as soon as the student begins to seek application or registration since ample time is necessary for locating appropriate aids. The Testing/Special Services/ADA coordinator can be contacted at 723-0371, Ext. 7248. Deaf students may call the coordinator by TTY at 723-3411.

Local Advisory Committees

Each curriculum has its own advisory committee. The committees are composed of representatives of local businesses, industries, education and community organizations.

The advisory committees provide the necessary contact between Forsyth Tech and the community in an effort to maintain current and relevant programs of instruction to meet the needs of the community.

Location and Facilities

The main campus is located at 2100 Silas Creek Parkway in the southwest section of Winston-Salem. The West Campus is located at 1300 Bolton Street at the intersection of Bolton Street and Silas Creek Parkway. The health technology curriculums are housed in the Allied Health Building at North Carolina Baptist Hospital and in the Bob H. Greene Hall on the main campus. These campuses are easily accessible from US Highway 52, North Carolina Highway 150, and Interstate Highway 40. The Downtown Center is located at 601 W. Fourth Street and the Fifth Street Center is located in the Main Library at 660 West Fifth Street.

Learning Centers are available on main campus and West Campus.

Hours of Instruction

Classes are scheduled between the hours of 6:30 a.m. and 11:00 p.m., Monday through Friday. Some courses are offered on weekends.

Students in health technology curriculums (particularly nursing curriculums) can expect clinical practice to be scheduled during any part of the 24-hour day, seven days a week.

Accreditation

Forsyth Tech is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree.

The Associate Degree Nursing curriculum and Practical Nursing curriculum are accredited by the North Carolina State Board of Nursing. Respiratory Care Technology and Medical Sonography are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Radiography and Radiation Therapy Technology are accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The Nuclear Medicine Technology curriculum is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT).

Electronics Engineering Technology, Manufacturing Engineering Technology, and Drafting and Design Engineering Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Forsyth Tech is a member in good standing of the American Association of Community Colleges.

Curriculums

Some curriculums may be available both day and evening. For specific information, contact the Admissions Office.

Associate in Applied Science Degree
Accounting*
Architectural Technology
Associate Degree Nursing
Automation/Robotics Technology
Automotive Systems Technology/
   Race Car Performance*
Business Administration*
Business Administration/Banking
   and Finance*
Business Administration/Marketing
   and Retailing*
Computer Engineering Technology
Criminal Justice Technology*
Early Childhood Associate
Electronics Engineering Technology*
Horticulture Technology
Information Systems*
Information Systems/Network
   Administration and Support*
Information Systems/Programming*
Machining Technology
Manufacturing Engineering
   Technology
Mechanical Engineering
   Technology/Drafting and Design
Medical Assisting
Medical Sonography
Nuclear Medicine Technology
Office Systems Technology*
Radiation Therapy Technology
Radiography
Respiratory Care
Speech/Language Pathology Assistant
College Transfer
Associate in Arts*
Associate in Science*
Diploma
Accounting*
Air Conditioning, Heating and
   Refrigeration Technology*
Autobody Repair
Automotive Systems Technology*

Carpentry
Electrical/Electronics Technology
Electronic Servicing Technology
General Occupational Technology*
Graphic Arts and Imaging Technology
Information Systems*
Information Systems/Desktop
Publishing*
Information Systems/Multimedia*
Information Systems/Network
   Administration & Support/LAN
   Technology*
Information Systems/Network
   Administration & Support/WAN
   Technology*
Information Systems/Programming*
Machining Technology*
Medium/Heavy Duty Vehicles
   Systems Technology (Diesel)
Office Systems Technology*
Plumbing
Practical Nursing
Welding Technology*
Technical Specialty Diploma
Cardiovascular/Vascular Interventional
   Technology
Computed Tomography & Magnetic
   Resonance Imaging Technology
Certificate
Computed Tomography
Health Care Technology
Information Systems*
Information Systems/Programming*
Information Systems/Internet
Technology*
Information Systems/Help Desk*
Magnetic Resonance Imaging
Manufacturing Engineering
   Technology
Office Systems Technology*
Real Estate *
Real Estate Appraisal**
Welding Technology*

Denotes day and evening curriculums . **Denotes evening only curriculums*

Consortium Programs

Degree/Diploma/Certificate is granted by a community college other than Forsyth Tech. Some or all course work in each of the following programs is available at Forsyth Tech.

Program	Level	Granting Institution
Archaeological and Historical Preservation Technology	A.A.S.	Randolph Community College
Archaeological Technician	A.A.S.	Randolph Community College
Film & Video Production Technology	A.A.S.	Piedmont Community College
Mechanical Engineering Technology/ Fire Sprinkler Design	A.A.S.	Guilford Technical Community College
Manufacturing Technology/ Integrated Operations	A.A.S.	Guilford Technical Community College
Medical Laboratory Technology	A.A.S.	Davidson County Community College
Funeral Service Education	Diploma	Fayetteville Technical Community College
Occupational Therapy Assistant	A.A.S.	Rockingham Community College
Paralegal Technology	A.A.S.	Surry Community College
Physical Therapist Assistant	A.A.S	Caldwell Technical Community College and Guilford Technical Community College

Corporate and Continuing Education Programs

Educational Services
  Basic Skills Assessments
  Customized Training
  Job Task Analysis
  Training Needs Assessments
Employee Health and Safety
Employee Organizational Effectiveness
  Employee Effectiveness
  Focused Industrial Training
  Languages and Culture
  Leadership Skills
  Quality Management
  Written and Oral Communication
Literacy Education
  Adult Basic Skills
  Adult High School Diploma
  Compensatory Education
  English as a Second Language

  General Educational Development (GED)
Health and Emergency Service Occupations
  Emergency Services
  Health Occupations
Personal Development
  Community Service Programs
  Human Resource Development
Professional Development
  Apprenticeship
  Computer Technology
  Industrial Technology
  New and Expanding Industry
  Pre-employment Training
  Small Business Center

Admissions

Admissions Requirements

Forsyth Tech is an Equal Opportunity Institution and operates under an open-door admissions policy. Admission to Forsyth Tech does not, however, imply immediate admission to the curriculum desired by the applicant. Before a prospective student is admitted to a specific curriculum, placement tests will be scheduled and counseling interviews may be arranged. This process helps the students to evaluate their potential for success in their chosen field. When an evaluation of test scores and other evidence indicates a lack of readiness to enter a specific curriculum, the applicants may be approved to take remedial coursework or may be encouraged to reexamine their educational and occupational goals.

Forsyth Tech will accept credit from other accredited technical institutes, community colleges, colleges and universities. For specific information refer to "Transfer Students"(p. 26).

Admission to Associate Degree Curriculums

High school graduation, or the equivalent as recognized by the state of North Carolina, is required of all applicants for degree curriculums. The high school equivalency certificate or the state adult high school diploma is acceptable in lieu of a regular high school diploma.

Applicants for the associate degree curriculums who are not high school graduates may arrange to complete high school in the Corporate and Continuing Education program or take the high school equivalency examination (GED).

Applicants for admission to the Drafting and Design Engineering Technology and Manufacturing Engineering Technology curriculums must present one unit of algebra and one unit of geometry. Information Systems/ Programming, Architectural Technology, Electronics Engineering Technology, and Automation/Robotics Technology applicants must present one unit of algebra. Applicants for admission to the Computer Engineering Technology curriculum must present three units of mathematics beginning with Algebra I and one half-unit of typing. Applicants for admission to associate degree health curriculums must present one unit in algebra, one unit in biology, and one unit in chemistry. Applicants to the Associate Degree Nursing curriculum must have completed the unit of chemistry within a five-year period. High school physics is recommended for the engineering technology and health technology curriculums. Applicants for admission to College Transfer Associate in Arts and Associate in Science curriculums must present two units of algebra and a unit of high school chemistry.

Applicants for associate degree curriculums should submit scores on either the Scholastic Aptitude Test (SAT) or the Computerized Placement Test (CPT). Information concerning the SAT may be obtained from local high school counselors or the Career Guidance Center in Student Development Services. Information on and registration for the CPT are available at the Information Desk in the Allman Center lobby.

Applicants for curriculums may be subject to approval by the Forsyth Tech Admissions Review Committee for that curriculum (particularly in the health technology curriculums). The members
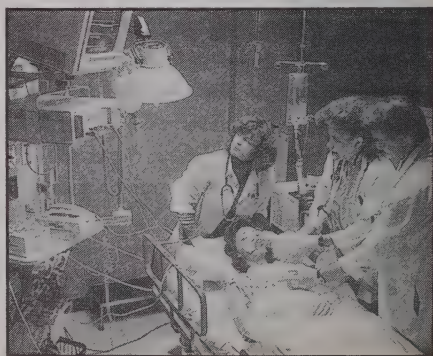
of the Admissions Review Committee come from instructional and administrative staff of the curriculums and the Student Development Services staff. The purpose of the committee is to evaluate all available data concerning each applicant. A majority of the committee must concur that applicants meet minimum criteria before they are admitted. Applicants for those curriculums in which the enrollment quota is filled before all applications are received will be informed that they may reapply for the next enrollment cycle. Some curriculums have more than a once-a-year enrollment cycle.

It should be noted that certain health technology curriculums have to admit applicants under state statutes of the licensure agencies. The North Carolina Board of Nursing has state statutes that identify reasons for prohibiting licensure for Associate Degree Nursing and Practical Nursing graduates. The reasons are presented during the admission process.

All students in Nuclear Medicine Technology, Radiography, and Radiation Therapy Technology come under the radiation exposure regulations of the state and federal governments (Radiation Safety Hazard Regulation). Any student who receives exposure in excess of permissible limits as defined by the regulations will be advised of the possible harmful effects and may be dropped from the curriculum. The regulations pertaining to students below the age of 18 are more stringent than those for the older student.

Admission to Diploma Curriculums

Applicants for one-year diploma curriculums must be high school graduates or meet North Carolina equivalency certificate (GED) standards. For non-high school graduates with special needs, however, exceptions may be made under certain circumstances in every curriculum except Practical Nursing.

Applicants who are not high school graduates may arrange to complete high school in the Corporate and Continuing Education program or take the high school equivalency examinations (GED) offered at the West Campus. Applicants may be admitted into some curriculums on the basis of high school records; however, scores on the SAT or the CPT may be required. Questions concerning the need for testing should be directed to the Admissions Office.

Because of the specialized nature of some of the curriculums, one unit of high school algebra is recommended for Air Conditioning, Heating, and Refrigeration; Electrical/Electronics Technology; Electronic Servicing and Machining Technology. High school geometry is also recommended for Machining Technology. Biology is recommended before entering Practical Nursing. Algebra I and chemistry are required for Practical Nursing.

Admission to the Practical Nursing curriculum may be subject to approval by the Health Admissions Review Committee.

Admission to Corporate and Continuing Education Programs

Persons enrolling must be 18 years old or older. Further information concerning admission and registration procedures may be obtained from the office of the vice president of Corporate and Continuing Education.

Special Information for Foreign Students

Foreign Students with visas are considered for admission through the normal admissions procedures and must meet residency requirements for in-state tuition. Students seeking admission with the use of an I-20 are directed to discuss their admission with the admissions staff.

Applicants graduating from high schools outside the United States must produce a translated transcript and must demonstrate high school proficiency through satisfactory scores on the GED and/or the CPT.

Residency for Tuition Purposes

Under North Carolina law, each person must be classified as a resident or nonresident for tuition purposes. North Carolina law (G.S. 116-143.1) requires that to qualify as an in-state student for tuition purposes, a person must have established legal residence (domicile) in North Carolina and maintained that legal residence for at least 12 months immediately prior to classification as a North Carolina resident. All applicants for admission are required to make a statement as to their length of residence in the state. Also, there are additional criteria that must be met to qualify.

To be eligible for classification as a resident for tuition purposes, applicants must establish that their position in the state currently is, and during the requisite 12-month qualifying period was, for purposes of maintaining a bona fide domicile rather than of maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education. The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant.

Residency for tuition purposes is initially determined by an admissions counselor during the approval of each applicant for admission to Forsyth Tech. The residency determination is stated to the students in their admission approval letter. A student who is deemed to be out of state for tuition purposes has the right to complete the Residence and Tuition Status Application for further consideration and appeal. This form, with a written request for appeal, is submitted to the associate dean of Enrollment Management who reviews the initial determination and renders a decision within two weeks based on the additional information. The applicant may be requested to provide additional information before the decision is made. Students still dissatisfied with the residency decision made at this level may appeal in writing to the dean of Student Development Services. The dean of Student Development Services will review all information submitted by the applicant and may ask for additional information for clarity. The student's entire file will be reviewed. A decision will be made within two weeks and the student will be informed in writing.

Questions regarding residency status should be directed to the Admissions Office.

ADMISSIONS PROCEDURES

An applicant for admission to any degree, diploma or certificate curriculum should:

1. Obtain an application from the Admissions Office or from a high school counselor.

2. Submit the properly completed application to the Admissions Office.

3. Arrange to take the Computerized Placement Test (CPT) through the Admissions Office. Scholastic Aptitude Test (SAT) scores may be substituted for the CPT. American College Test (ACT) scores may also be substituted for programs other than health.

4. Request that a transcript of all high school and post-high school academic work be sent directly to the Admissions Office.

5. Submit recommendations if requested.

6. Report for an interview, if requested, on the date scheduled by the Admissions Office. At this interview, test scores and previous academic records will be evaluated and the applicant will be advised as to eligibility for admission to the desired curriculum. If an interview is not necessary, students will be notified of their status in writing.

7. Submit a properly completed health appraisal form when requested.

8. Participate in an orientation program prior to entry into a curriculum.

Students who are currently enrolled and wish to be considered for another curriculum must update their application in the Admissions Office.

Tuition and Fees

General Tuition and Fees

Forsyth Tech receives funds from local, state, and federal sources. Tuition charges are set by the State Board of Community Colleges and are subject to change without notice.

In-State Tuition:
> *$20.00 per semester hour

Out-of-State Tuition:
> *$162.00 per semester hour

Students enrolled for 12 credit hours are considered full-time (9 credit hours during summer session).
Students will be charged per credit hour up to 14 credit hours.

* For summer semester, 1997, in-state tuition will not exceed $180.00; out-of-state tuition will not exceed $1,458.00. *Tuition rates are subject to state board approval.*
Example:

Hours taken	In-State	Out-of-State
12	$240.00	$1,944.00
13	$260.00	$2,106.00
14	$280.00	$2,268.00

No tuition is charged for noncredit classes in the Corporate and Continuing Education Division. However, a registration fee may be charged. No tuition or fee is charged for Adult Basic Education courses. Normal tuition rates will apply if courses are taken in the Learning Center. No tuition is charged for individuals aged 65 and over except self-support continuing education courses. Supply fees are set to meet instructional needs in certain types of courses. Some curriculums require a pre-admission physical examination which involves additional cost to the student.

Policy on Restrictions on Class Admission

No person may attend classes unless the registration procedure has been completed, all tuition and fees paid, and all debts to the college settled.

Student Activity Fee

It is the policy of Forsyth Tech that a $7.00 student activity fee be charged. The activity fee for curriculum students will be collected during each registration. This fee is not refundable.

Students become members of Forsyth Tech's Student Government Association when they pay the student activity fee. The term "activity fee" may be misleading because the fee is used for more than just providing activities. Below is a list of expenses covered by the student activity fee.

1. **Graduation expenses** are partially covered. It costs over $25.00 per student to hold a graduation ceremony. Currently, students pay a graduation fee of $10.00 for each diploma received.
2. **Student activities and entertainment** such as cookouts, dances, and Spring Fling are free to students.
3. **Athletic teams** participate in men's basketball, volleyball, softball, and tennis league play with other community colleges. Equipment and registration fees are paid out of the student activity fee budget.
4. **All Student Government Association expenses** are paid out of student activity fee funds. Expenses include a portion of the student activities facilitator's salary, supplies, and materials for the SGA Office, and all SGA printing expenses.
5. **Attendance at SGA conferences** is a major expense of the SGA. Forsyth Tech is a member of the North Carolina Comprehensive

Community College (N4C) Student Government Association. The N4CSGA offers three conferences each year. These conferences offer workshops and seminars to prepare students to lead the SGAs on their campuses.

For more details about the budget or to become involved in any of the activities listed above, contact the student activities facilitator in Snyder Hall.

Books and Supplies

Textbooks and supplies are not furnished by Forsyth Tech; they are the responsibility of the student and may be purchased at the bookstore. The cost of books and supplies varies from curriculum to curriculum each semester.

Uniforms

Uniforms and other special apparel will be paid for by the student. The initial cost of uniforms and special equipment for each health curriculum varies. Students should ask for details in the Admissions Office.

Lab Fees

Some selected courses charge a lab fee for supplies, software and equipment usage. These fees range from $10 to $55.

Other Fees

No laboratory breakage or property damage fees will be charged to students. However, in case of breakage or damage due to gross negligence or maliciousness, a student will be expected to reimburse Forsyth Tech. Academic credit and official transcripts may be withheld until proper payment is made.

Graduation Fee

A $10 graduation fee will be charged to the student for each degree, diploma, and/or certificate that the student applies for. A $10 nonrefundable graduation fee will also be charged to the Adult High School graduates.

Transcript Fee

A $2 fee is assessed for each copy of the transcript requested, whether official or unofficial.

Parking

Visitors are welcome on the campus of Forsyth Tech. Designated visitor parking areas will be indicated by campus signs. Any visitor receiving a ticket should return it to the person or office visited.

Students planning to park on campus are required to purchase a $7 parking decal at the time of registration. This fee is not refundable. Specific rules governing parking will be issued with each vehicle registration and may be found in the current issue of the *Student Handbook*.

Liability Insurance for Health Students

All health students must purchase annual liability insurance, which may vary according to curriculum or insurance carrier, before engaging in lab or clinical practice. Health students who enter or reenter at a semester other than fall semester will pay a prorated cost for that year.

Tuition Refunds

Tuition and supply fees can be considered for a refund. Student activity fees will be refunded only when classes are cancelled. Students must complete a Request for Tuition Refund form in the Records Office when they drop class(es), and/or if classes are cancelled. All requests are reviewed and notification will be mailed to the address provided on the form upon completion of processing.

A 100 percent refund shall be made if the student officially withdraws prior to the first day of class(es) of the academic semester as noted in the college calendar. Also, a student is eligible for a 100 percent refund if the class in which the student is officially registered fails to "make" due to insufficient enrollment and is cancelled by the college.

After registration day(s) and beginning with the first day of classes, a 75 percent refund shall be made if the student officially withdraws from the class(es) prior to or on the official 20 percent point of the semester.

In the event a student, having paid the required tuition for a semester, dies during that semester (prior to or on the last day of examinations), all tuition and fees for that semester may be refunded to the estate of the deceased.

Guidelines

1. Students passing proficiency examinations for courses they have registered and paid for are not eligible for tuition refunds.
2. Refunds of $5 or less will not be made except for classes cancelled by Forsyth Tech.
3. Fees other than tuition, supply, and lab fees cannot be refunded.
4. Tuition is not transferrable to other individuals.
5. Late tuition refund requests will not be considered.
6. Tuition refunds for Corporate and Continuing Education classes are processed at the West Campus on Bolton Street.
7. Tuition can not be held from one semester to a future semester.

Student Financial Responsibility

The Business Office recommends the use of cash, certified checks, cashier's checks or Mastercard/Visa credit cards for payment of tuition, fees, and charges. Personal checks will be accepted only with a numbered ID that has a picture of the student (usually a valid driver's license). Third-party, out-of-country, out-of-state, and business checks will not be accepted.

Personal checks may be written to pay for tuition and fees. If checks are returned for any reason, there will be a service charge of $20 for each returned check. Any student who does not have money for tuition and fees or does not have on file in the Business Office a written authorization from a sponsoring agency will not be allowed to register.
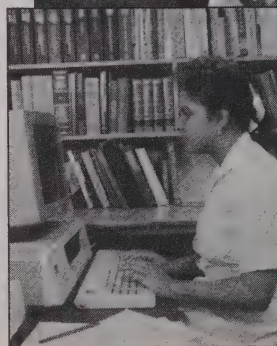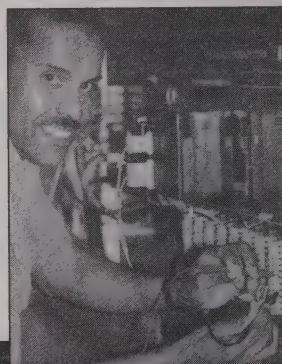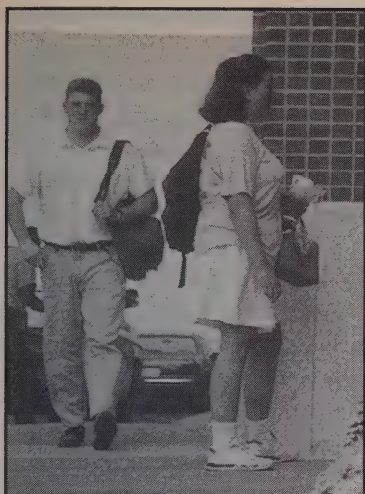
Academics

Beginning Summer, 1997, all community colleges in North Carolina will be on the semester system. Students who have completed quarter courses with designated course equivalents (as defined by the 1996 crosswalks) will be granted credit for the new equivalent semester course through summer session 1999.

With the start of fall 1999, consideration for equivalent credit will no longer be based on the crosswalks. This means that beginning fall 1999, equivalent hours (i.e. 5 quarter hours equals 3 semester hours) will need to be taken into account when credit is given for semester courses at Forsyth Tech.

Students should contact their advisor to determine completion requirements for their program of study.

Orientation and Registration for New Students

It is strongly recommended that all new curriculum students participate in an orientation and registration session conducted by the counseling staff and faculty. The purpose of this session is to register the students and to acquaint them with personnel, faculty, and student organizations. The regulations, policies, and privileges of Forsyth Tech as set forth in the *General Catalog* and *Student Handbook* are discussed and interpreted. Specifics are presented on departmental rules and schedules for individual curriculums that entering students are required to be familiar with while enrolled.

Registration for Currently Enrolled Students

The registration and prepayment dates for currently enrolled students are posted during the latter part of each semester. All currently enrolled students are required to meet with their advisor to determine a schedule of courses for the upcoming semester. Any questions arising during this registration period concerning transfer credit for a course(s) should be directed to the appropriate admissions counselor. Students who do not pay tuition and fees on designated prepayment or registration days will have their registrations voided and will be dropped from all classes.

Walk-In Registration

Walk-In registration is provided for special credit applicants who are not enrolled in a curriculum but wish to enroll in a few courses. Special credit applicants wishing to participate in walk-in registration should come to the Admissions Office on the scheduled day to register and pay tuition and fees. To minimize delays in processing, it is recommended that applications be submitted at least one week prior to the walk-in registration date published in the college calendar.

Late Registration Day(s)

On late registration day(s), as published in the college calendar, all approved students may see their advisor

and register for classes for that semester. Advisors are on campus to assist students with the registration process and the cashier's office is open to accept tuition/fees. Students may register for or drop courses on this day(s).

Class Attendance

Students are expected to attend all class, laboratory, shop, practicum, and clinical experience sessions. Students have full responsibility for accounting to their instructors for any absence and should report to their instructors as soon as possible to determine if and when work may be made up.

Students are expected to report for class, laboratory, shop, practicum, and clinical experience on time. Habitual tardiness may, at the discretion of the instructor, be considered in computing attendance.

Students must satisfy the instructor that they should be permitted to remain in a course and attend classes after incurring absences in excess of the following:

1. five (5) hours of class;

2. three (3) practicum (shop, laboratory, or clinical experience) sessions which meet for two (2) or more hours;

3. three (3) hours of class and one (1) practicum (shop, laboratory, or clinical experience) session which meets for two (2) or more hours.

When students are absent from a class and a practicum (shop, laboratory, clinical experience) session which meet consecutively, each session missed will be counted as an absence.

Students will be informed in writing no later than the second class meeting when a course requires any special attendance rules different from those listed above. These special attendance rules must be on file in the office of the appropriate dean.

Class attendance is calculated from the first officially scheduled class meeting, which includes the drop/add period, through the last scheduled meeting.

Advisor/Advisee

Forsyth Tech has an advisor/advisee program which is designed to provide a more personal atmosphere for the student and to increase communication between students and faculty. Each student is assigned a curriculum advisor. Through periodic conferences between the student and advisor, it is hoped that the student will be better able to follow an academic program from semester to semester and that potential problems will be avoided.

Each advisor will post regular office hours so that the student can arrange a conference to discuss or explore any problem or condition. Students should see their advisor prior to registration for course advisement. Students are not allowed to register without proper advising. The college requires the advisor's signature to register for classes or to add them. If a student signs for or changes the courses agreed upon it is grounds for dismissal from school.

Each student is assured that all discussions are confidential. When necessary, the student may be referred to the Counseling Center. Students are ultimately responsible for registration and final selection of their courses.

Drop/Add

A student may drop and add classes during the drop/add period.
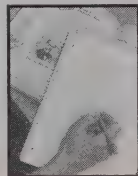
Course Numbering System

Courses are numbered in accordance with the system approved by the North Carolina Community College System. Each course is designated by a three-letter prefix indicating the general subject area. A number indicating a specific course within an area follows the letter prefix according to the following rules:

1. Developmental Education courses or noncredit courses 001-099

2. Degree and Diploma courses 100-299

Grading System

The following grading system is **generally** used by Forsyth Tech:

Number Grade	Letter Equivalent	Description	Quality Pts. per Grade Hr.
94-100	A	Excellent	4
86-93	B	Good	3
78-85	C	Fair	2
70-77	D	Passing	1
Below 70	F	Failing	0
Withdrawal	W		
Withdrawal Passing	WP		
Withdrawal Failing	WF		
Incomplete	I		
Audit	Y		
Course Transferred	TR		
Credit Granted or Passed Proficiency	CR		

> *The letter equivalent system is used for recording and reporting grades.* Any variation on the grading system must be distributed to students in the course syllabus at the beginning of the semester.

W - Withdrawal. A Withdrawal is the grade given to a student who officially withdraws from a course through the 50 percent point of the semester or the 50 percent point of a class when the class does not follow the regular semester calendar.

WP/WF - Withdrawal Passing/ Failing. A Withdrawal Passing/ Failing is the grade given to a student who officially withdraws from a class at any time after the 50 percent point of the semester.

A student may officially withdraw after the 50 percent point only after talking with the instructor of the class. If the student officially withdraws or if the student is dropped by the instructor, the instructor will determine if a grade of WP or WF is appropriate.

I - Incomplete. The grade of Incomplete is given only if a student has a valid reason for failure to complete the work on schedule. Illness, absence on company business, or circumstances beyond the student's control are considered valid reasons for incomplete work. The student must have advised the instructor of the circumstance before the end of the semester to be granted an Incomplete grade. The instructor must have specified the work to be made up in order to remove the Incomplete grade and a date within the following semester by which the work must be completed. If the conditions necessary to remove the Incomplete grade will require additional hours of instruction, the student must register for the course again. If the student needs only to complete work without instructional supervision, this work must be completed no later than the end of the following semester.

Any student who receives an Incomplete grade on a course that is a prerequisite for a higher level course must make-up the incomplete work by the end of the drop/add period in order to be allowed to register for the higher level course.

If the Incomplete grade is not removed by the end of the semester immediately following the semester it was given, it will remain permanently recorded.

Y - Audit. Students auditing courses are not required to take examinations

or submit written work but may do so if they wish. No grade or credit toward a degree/diploma is given. An audit may not be changed to credit, or credit changed to audit after the 10 percent point of the semester or the 10 percent point of the class when the class does not begin within the first five days of the semester. Normal attendance policies will apply. Students withdrawing during the semester will be given the grade of W.

The Audit Request form is available in the Records Office or from the appropriate division dean. It must be submitted to the Records Office for processing by the 10 percent point of the class.

How to Withdraw

Every student who is considering withdrawing from a class or from school should contact their instructor or the Records Office to discuss the decision to withdraw. When the student initiates a withdrawal or drop, the date the student completes the Drop Form is considered the official withdrawal date by the Records Office. When the instructor initiates a drop, the date the instructor records on the Drop Form is the official withdrawal date.

Withdrawal from a Class - It is the student's responsibility to personally notify the instructor, the advisor or Records Office of the decision to withdraw and to complete a Drop Form.

Total Withdrawal from School - A student who must withdraw from school before graduation, either permanently or temporarily, should withdraw officially. Students must notify their instructors or go to the Counseling Center in person and complete a Drop Form and the Semester Withdrawal Notice. This information is necessary to ensure that the student's status at the time of withdrawal is clearly identified in order to expedite reentry, transfer of credit to another institution or to provide potential employers with accurate education information. Veterans and financial aid recipients must notify Student Financial Services. When students fail to notify the Records Office or instructor, they may receive a failing grade.

Prerequisites for Curriculum Courses

Many curriculum courses have prerequisites to make sure that courses are taken in the proper sequence. If the occasion arises in which a prerequisite should be waived, both the appropriate department chairperson and dean must approve the waiver in writing. If a course affects more than one division, written approval may be necessary from more than one department chairperson and dean before the student registers for that course.

Appeal Concerning a Grade
(Academic Appeal)

Any appeal of a course grade should begin with a scheduled conference between student and instructor. If the appeal is not resolved at this level, the student should arrange a conference with the appropriate department chairperson. If the student does not accept the decision of the department chairperson, the student may appeal to the appropriate division dean. The student has the responsibility to provide the dean with a written letter of appeal by the first class day of the new quarter in order for the appeal to be considered. After conferencing with the student, the dean can convene a division Academic Appeals Committee. This committee will hear the appeal and make a recommendation to the dean. The final decision is made by the dean,

who will notify the student, the instructor, and the appeal committee chairperson in writing. Questions concerning the appeal process should be directed to the instructor, department chairperson or the dean's office.

The student's letter should include:
1. date, student's name, signature and telephone number.
2. prefix and number of course for grade being appealed.
3. name of instructor issuing the grade.
4. brief explanation of why the student feels the grade is incorrect and what the student feels the grade should be.
5. any supporting documentation the student feels is needed to explain more fully the students position on the grade.

The appeal letter and any supporting documentation will be duplicated for the committee to review.

Academic Standing/Probation

To be in good academic standing, a student must have earned a cumulative grade point average (GPA) of 2.0 by the end of the first semester at Forsyth Tech. A cumulative grade point average of 2.0 must be maintained thereafter to remain in good standing.

A student who does not maintain the required 2.0 cumulative GPA will be placed on academic probation for the following semester. Students who do not earn the required GPA in the next semester will have their academic records reviewed by the division Academic Review Committee, which meets at the end of each semester. The committee may reduce the number of credit hours the student will be allowed to carry, require the student to repeat courses in which a low grade was earned, or elect to remove the student from the curriculum.

The student will be notified in writing of the committee's decision, and copies of the notice will be sent to the Records Office, the division dean, and the student's advisor. Students will be removed from probation automatically when the cumulative GPA reaches 2.0.

All students enrolled at Forsyth Tech are expected to be fully aware of their academic status at all times and to be responsible for fulfilling the requirements necessary to remain in school and in good academic standing. Instructors, faculty advisors, and counselors are available for assistance, but it is the responsibility of the student to seek help. *Final responsibility for satisfactory academic progress is the obligation of the student.*

Appeal of Academic Review Committee

A student may appeal the decision of the division Academic Review Committee by submitting a written request to the appropriate division dean within 24 hours after formal notification of the committee's decision. The dean will convene the division Academic Appeals Committee, which will hear the appeal and make a recommendation. The dean will make the final decision on the matter and send written notification to the student, the department chairperson, and the student's advisor.

Course Repeat Rule

The last grade earned on a repeat course will be the grade computed for GPA. Withdrawal grades of W or WP will not be considered as repeat grades. A grade of WF will be considered as a repeat grade.

If students fail any course in their curriculum, they must repeat the course until a passing grade is received; otherwise, they cannot receive a degree, diploma, or certificate. Students are responsible for scheduling make-up courses required for graduation. Students may repeat a course at another college to meet graduation require-

ments. However, the repeated course will not affect the GPA at Forsyth Tech. The last grade at Forsyth Tech will remain on the transcript and will be computed in the GPA.

Students who fail one of the courses in the major subject area, may be referred to the Counseling Center for counseling. The appropriate dean will make the final decision on students' permission to repeat a class after several attempts with a failing grade.

Grade Reports and Transcripts

Student's grade reports are mailed to their permanent address after the end of each semester.

Transcripts of all course work attempted at Forsyth Tech are maintained in the Records Office. Requests for copies of a student's transcript should be made in writing to the Records Office. Transcripts will not be issued without the written authorization of the student. All transcripts will reflect the student's complete academic record. Partial or incomplete transcripts will not be issued. Official transcripts are issued to employers, educational institutions, etc. Transcripts issued to students are unofficial and indicate that they were issued to the student. Official transcripts may be issued to students in a sealed envelope. However, the transcript will have a notation that this was done. The receiving party will be responsible for determining if they will accept it as an official transcript.

A fee of $2 is assessed for each copy of the transcript requested, whether official or unofficial. Transcripts are not issued if a student's file has been sealed or if tuition, fees, and other obligations due to Forsyth Tech have not been satisfied.

Transcripts from other high schools and colleges will not be released to the student or a third party.

Course Substitution

Course substitution may be granted when deemed necessary for graduation or as a necessary accommodation to complete a degree. The appropriate dean's permission is required.

Clinical Experience in Health Curriculums

1. Clinical hours in any of the health curriculums may be scheduled during any part of the 24-hour day, seven days a week.

2. Students will be informed in writing no later than the second class meeting when a clinical course has special attendance requirements.

3. In order to pass clinical courses, students must pass all critical requirements for the course.

4. Required uniforms must fit neatly in order for the student to meet the dress code of both Forsyth Tech and the clinical facilities.

5. There are certain areas (operating room, obstetrics, isolation rooms) in the hospitals that require special hospital garments. To control infection, hospital policy requires that only those garments supplied by the hospital be used. Students who are unable to wear and be covered by these garments will not be allowed to go into that clinical area, which may jeopardize their ability to complete the curriculum.

6. Failure to meet any dress requirements may jeopardize the student's ability to continue in a curriculum.

Student Classification

Full-time: A student who is enrolled in 12 or more credit hours of course work; 9 hours for summer semester.

Part-time: A student who is enrolled in fewer than 12 credit hours of course work; fewer than 9 hours summer semester.

Special Credit: A student who is enrolled in credit courses but who is not working toward a degree, diploma, or certificate.

Audit: A student who is enrolled in regular course work but who is not receiving credit for work undertaken.

Developmental Education Program

This program offers a series of courses for preparation, remediation, and academic guidance to students who, for a variety of reasons, need additional courses because they do not meet the specific entrance requirements for the curriculum of their choice. The student's academic study program is individually designed to meet that student's specific needs. The program provides students with an opportunity to build academic skills and acquire the background which should facilitate success in their desired curriculum.

Special Credit Policy

A special credit student is one who is taking one or more curriculum credit courses, but who is not enrolled in a specific curriculum. Special credit students are permitted to register for some credit courses without having to be admitted as a regular curriculum student, provided that prerequisites have been met and that such registration does not preempt students enrolled in a degree, diploma, or certificate curriculum. Some credit courses will not be available to special credit students without prior instructional division approval.

For admission to Forsyth Tech, a special credit student needs to be a high school graduate and to complete the student application. All special credit students may be asked to take the CPT and furnish an official transcript, unless these requirements are waived by the Admissions Office. Special credit students must submit an updated application and meet regular admission requirements to be approved or reclassified as a curriculum student. Satisfactory completion of courses as a special credit student does not guarantee admission to a curriculum.

Special credit students who earn 20 credit hours will be advised to seek admission into a curriculum. However, there are no limitations on the number of credit hours earned by a special credit student. All credit hours will be evaluated for application to curriculum admission when and if the special credit student applies.

Generally, students are approved for special credit status in the following circumstances:

1. The student desires to take some relevant credit courses prior to being able to start a specific curriculum. The student may desire to complete these courses before entering that curriculum in order to reduce course load once in the curriculum to improve chances for success.

2. The student desires to take specific courses, but does not plan to pursue and complete a curriculum at Forsyth Tech.

3. The student has been denied admission into a specific curriculum that has already reached its quota at the time of application but wishes to complete the related courses.

All policies, rules, and the Code of Conduct apply to special credit students. Special credit students are not eligible for any form of financial aid through Forsyth Tech.

Those students who are designated to be in the Developmental Education program based on placement test scores are not eligible to be considered as special credit students.

Readmission

Students who have withdrawn in good academic standing should contact the Admissions Office to update their application. If the application for readmission is for a different curriculum, standard admission requirements for new students will apply.

Students who have withdrawn while on academic probation or who have been suspended for academic deficiencies must reapply through the Admissions Office. Approval for readmission to the same curriculum or a different curriculum will be based on the applicant's ability and aptitude, the time elapsed since withdrawing, recommendations of the appropriate division personnel, and the applicant's career objectives. Students granted readmission may have course load restrictions, specific grade requirements, and/or required counseling sessions in order to remain enrolled in the curriculum. When good academic standing has been reestablished, the restriction(s) will be removed.

There are specific additional guidelines for reentry into the health curriculums. These guidelines may be obtained from the Admissions Office.

Former students who reapply for admission may be asked to supply the Admissions Office with transcripts and test scores.

Students who have been suspended for disciplinary reasons or health/safety reasons cannot be readmitted without submitting a request for readmission to the dean of Student Development Services. The request for readmission is subject to review by the division dean.

Independent Study

Independent study provides an alternative for a student to earn credit for certain required courses. It should be used only when it has been determined that it would create an unreasonable hardship for the student to wait for the course to be available. Guidelines to be used are as follows:

1. To be considered for independent study, students must file a Request for Independent Study form with their advisor, who will review the request and forward it with suggestions to the division dean for final action. The form should be completed during registration, and the student must register for the course during the registration period.

2. Acceptable reasons for allowing a student to take an independent study are (1) one-time course sequencing difficulties, (2) scheduling problems that were no fault of the student, and (3) needing the course for graduation at the end of the semester.

3. Students will not be approved for independent study if their cumulative GPA is less than 2.0 or if they have failed or withdrawn failing from the course in question.

4. Students may be limited in the number of independent study courses taken to complete degree requirements. Exceptions require special approval from the division dean.

5. All independent studies must be taught by a full-time instructor.

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Proficiency Exams

A student who has been approved for admission or a student already enrolled in a curriculum of study may request to take a proficiency exam for a course for which a proficiency exam is available. The appropriate department chairperson must grant the student permission to earn credit for the course by proficiency evaluation. It is not necessary for a student to be registered or enrolled in a course before requesting a proficiency exam. However, if the student is enrolled in a course for which a proficiency exam is requested, the request must be made by the tenth class day. A student who withdraws from a course after the tenth class day in any semester and has not formally submitted a request may not earn credit for that course by proficiency exam for a period of one year. The academic advisor will certify that the student has not been enrolled in the course within the past year and that the prerequisites for the course have been satisfied. Some curriculums have restricted proficiency exams, and the student must be admitted to that curriculum before a request will be considered. A student may take a proficiency exam for a given course only once in a twelve-month period. A Request for Proficiency Exam form must be completed, and a $10 nonrefundable fee is charged for each proficiency exam. Students who successfully pass a proficiency exam for a class will be given a grade of CR and hours earned will be granted, but it will not affect their grade point average. Guidelines on how to apply for a proficiency exam can be obtained from the office of the appropriate division dean and the Counseling Center. Tuition and fees are nonrefundable.

Transfer Students

Applicants who have attended other post-secondary institutions may transfer credits in courses comparable in content, objective, quality, and credit hours to those offered at Forsyth Tech. Direct transfer of credits may be granted if the student is transferring from an institution that is regionally accredited or is a member of the North Carolina Community College System.

No grade lower than C may be transferred from other institutions. Courses taken on a pass/fail basis will be considered only after receiving information regarding requirements necessary to receive a pass grade. The final decision on the transfer of credit for questionable courses will be made by the associate dean of Enrollment Management after consultation with the appropriate department chairperson. A written evaluation will be sent to the student.

Credits transferred from other schools will be reflected on students' transcripts as hours earned and will not be used in the computation of grade point averages. A grade of TR will be given to show that the course was transferred from another college. If a student changes curriculums at Forsyth Tech, credits attempted, grades, hours earned, and quality points can be transferred to any other curriculum with identical courses. A student's initial cumulative GPA in a new curriculum will be computed from the credits forwarded to that curriculum. For courses that are not identical but are comparable, credit will be granted in the same manner as courses transferred from another institution. Such courses will not be used in computing GPA; only hours earned will be transferred, and a grade of CR will be given to show this credit.

Many courses with a technical or skill content have time limitations on the acceptance of transfer credit. This includes credits earned at other institutions and/or credits earned at Forsyth Tech. Generally, courses in this classification taken more than five years before entry into Forsyth Tech cannot be

considered for transfer purposes. A complete list of these courses and the specific time limitations are maintained by the Admissions Office. In such instances, students may challenge out-of-date courses by proficiency examinations when appropriate and available.

Inquiries concerning transfer credits granted must be made to the admissions counselor during the student's first semester of enrollment. If the student is not satisfied with the transfer credit granted, requests should be made in writing to the associate dean of Enrollment Management, who will confer with the appropriate division dean. After deliberation between the division dean and the associate dean of Enrollment Management, the student will be notified of the final decision on transfer credit to be granted.

Transfer of Earned Credit between Forsyth Tech Curriculums

Credits earned in any Forsyth Tech two-year curriculum may be credited toward other two-year curriculums or a diploma curriculum upon evaluation and acceptance by the admissions counselors. All transfer credit must be approved by department chairpersons.

Transfer to Senior Colleges and Universities

The College Transfer curriculum is designed to provide a quality educational experience equivalent to the first two years of a liberal arts college curriculum. Students who have earned the degree of A.A. (associate in arts) or A.S. (associate in science) can transfer to most public or private senior institutions with full junior-year standing. A minimum GPA of 2.0 is required for acceptable transfer credit.

The college transfer curriculum enables the student to prepare for virtually any area of major interest. The curriculum requires a minimum of 4 semesters. Courses are offered in mathematics, literature and grammar; humanities; physical education; and the social, physical, and life sciences. Counselors and advisors are available to assist students in planning acceptable programs for transfer to the desired college or university. The Career Guidance Center maintains copies of all college transfer agreements for student review.

Students who need to improve their academic skills or gain credit for courses not taken in high school can do so through developmental education noncredit courses.

Technical-level credit earned in the A.A.S. (associate in applied science) degree programs at Forsyth Tech may be transferred to similar programs at other institutions. Acceptability of all technical transfer credit is determined by the institution to which the student wishes to transfer. Diploma credit is not transferrable to senior institutions.

The Career Guidance Center maintains a list of senior colleges and universities which currently accept some or all of the credit earned in the curriculums at Forsyth Tech. However, it is the student's responsibility to contact the Admissions Office at the receiving institution for transfer information.

Course Credit and Advanced Placement

Advanced placement credit or exemption from specific degree requirements in the College Transfer curriculum may be granted by Forsyth Tech. Students should contact their secondary school counselors regarding dates and local test centers.

College Board Advanced Placement (AP) Program

Secondary school students enrolled in AP courses may receive college credit by taking AP examinations upon completion of the courses and forwarding the results to the Admissions Office for evaluation.

Advanced Placement Exams

Exam	Score Required	Hours Granted	Courses
Art History	3	3	ART 111
Biology	3	4	BIO 111
	4 or 5	8	BIO 111 & 112
Calculus AB	4 or 5	4	MAT 271 & 271A
Calculus BC	3	4	MAT 271 & 271A
	4 or 5	8	MAT 271 & 271A, 272, 272A
Chemistry	3	4	CHM
	4 or 5	8	CHM
English Language	3	3	ENG 111
	4 or 5	6	ENG 111 & 113
English Literature	3	3	ENG 241
	4 or 5	6	ENG 241 & 242
European History	3	3	HIS 121
	4 or 5	6	HIS 121 & 122
Government & Politics, US	3	3	POL 120
Physics B	3	5	PHY 151
Physics C - Mechanics	3	5	PHY 251
Physics C - Electricity & Magnetism	3	5	PHY 251
Spanish Language	3	3	SPA 111
	4 or 5	6	SPA 111 & 112, 211, 212
Statistics	3	4	MAT 155 & 155A
U. S. History	3	3	HIS 131
	4 or 5	6	HIS 131 & 132

Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act of 1974 (FERPA) provides many safeguards regarding the confidentiality of and access to student records.

1. Students may review their educational records by making a written request to the coordinator of Records.
2. Student records will not be reviewed by third parties unless permission is obtained in writing from the student. Exceptions may be made for instructors and administrators if the information is for educational purposes. Exceptions may also be made for parents who claim the students as dependents and for credentialing, auditing, or accrediting organizations. The dean of Student Development Services will make the final decision concerning access to records.
3. Official transcripts will be issued only when a written request is received from the student. Transcripts from high schools or other colleges will not be released.
4. Forsyth Tech does not publish or distribute directory information or any personally identifiable information.
5. Forsyth Tech publishes the names of graduates in the graduation program and in local news media. Names of students attaining academic honors each semester are also published. Students who do not wish their names published for graduation or academic honors must notify the Records Office in writing of their desire not to have their names published.
6. Authorities with court orders are permitted to review records in the presence of Student Development Services administrative staff.

Graduation Requirements

A student wishing to receive a degree, diploma, or certificate from Forsyth Tech must fulfill all course requirements. Students must have earned a cumulative grade point average of 2.0 in the curriculum from which they are graduating and must have received a passing grade in all required courses.

Grade point average is obtained by dividing the total quality points earned by the total number of credit hours attempted.

A candidate for an associate degree must complete at least 20 semester hours of credit at Forsyth Tech, with a minimum of ten (10) credit hours in the major area. A candidate for a diploma must complete at least ten (10) hours of credit work at Forsyth Tech, with a minimum of 8 semester hours in the major area courses. Candidates for a certificate of completion must complete a minimum of 25 percent of their required course work at Forsyth Tech. Credit hours required in residency may not be met by proficiency examination.

Course requirements vary according to curriculum. Students should refer to the course requirements for their curriculum to determine if all requirements have been met and should be aware at all times of their progress toward graduation. Course substitution may be granted by the appropriate dean when deemed necessary for graduation.

Students graduate with the course requirements that are applicable at the time they enroll in a curriculum if they remain continuously enrolled until graduation. Students who withdraw from a curriculum for two or more semesters must graduate with the course requirements that are in effect at the time they reenroll. Any exceptions must be approved by the appropriate division dean.

It is the responsibility of the student to complete the Intent to Graduate form at the time of their last registration. Intents filed within 12 weeks of graduation will not be accepted for that graduation but will be applicable for the next graduation. Intent to Graduate forms are available in the Records Office or Cashier's Office. There is a $10 nonrefundable graduation fee that must be paid at the time the form is filed.

Graduation Honors and Awards

Any student who has earned a cumulative GPA of 3.75-4.00 at Forsyth Tech will be granted a diploma or degree with High Honors. Any student who has earned a cumulative GPA of 3.25-3.749 will be granted a diploma or degree with Honors. A seal of recognition will be placed on the student's degree or diploma, and the student's transcript will be noted to reflect this achievement. To be eligible for Honors or High Honors, at least 20 semester hours must be completed at Forsyth Tech for those students enrolled in an associate degree curriculum, and at least 10 semester hours must be completed at Forsyth Tech for those students enrolled in a diploma program. Only graduates in curriculums leading to a degree or diploma qualify for this academic recognition. Graduates of the curriculums leading to a certificate of completion do not qualify.

Semester Honors
President's List:

At the end of each semester, a President's Honors List will be published to honor those students with a 4.00 GPA. To be eligible for the President's Honors List, students:

a) must be approved and enrolled in a curriculum, excluding Developmental Education students, General Technology core curriculum students, special credit students, and certificate students.

b) must earn a 4.00 GPA on a minimum of 9 credit hours of curriculum courses.

c) must have completed all course work for the semester. Students with grades of "I" will not be eligible.

Deans' List:

The Deans' List is published each semester to honor those students with a GPA of 3.50 to 3.999. To be eligible for the Deans' List, students:

a) must be approved and enrolled in a curriculum, excluding Developmental Education students, General Technology core curriculum students, special credit students, and certificate students.

b) must earn a 3.50 GPA or above on a minimum of 9 credit hours of curriculum courses.

c) must have completed all course work for the semester. Students with grades of "I" will not be eligible.

Commencement Exercises

Commencement exercises are held at the end of spring and summer semesters on the dates published in the academic calendar. Degrees, diplomas and certificates are awarded at this time. Students are expected to notify the Records Office of their intention to participate in the exercises when they submit their Intent to Graduate form.

Commencement Marshals

Marshals are selected from full-time students in degree curriculums who have maintained the highest scholastic averages. The marshal who has the highest academic average is named chief marshal.

School Rings and Pins

Students in good standing who have completed at least one-half of the credit hours required for graduation in their curriculum may order a school ring. The student is required to pay a deposit at the time the ring is ordered with the balance due upon delivery.

Pins for health curriculums are also available. Orders for both pins and rings may be placed with the bookstore.

Sealed Records

A student's records may be sealed from the student's review and closed for purposes of readmission and grade posting due to financial debt to the school or litigation involving the student and the school. Inquiries regarding sealed records should be directed to the Records Office. Transcripts will not be issued as long as the file remains closed.

Student Code of Conduct and Responsibilities

Code of Conduct

The act of enrollment at Forsyth Tech includes an acceptance by the student of the rules of Forsyth Tech. By enrolling, the student accepts the obligation to assist in making Forsyth Tech an effective place to conduct a learning process and to engage in the pursuit of truth, the development of self, and the improvement of society. Each enrolled student is considered to be a responsible adult, and Forsyth Tech assumes and requires that men and women who enroll in the various programs will maintain standards of conduct appropriate to the status of students at Forsyth Tech.

Forsyth Tech has an inherent responsibility to maintain order on its campus. Therefore, students may or shall be suspended or dismissed for behavior deemed incompatible with the mission, the regulation, or the responsibility of Forsyth Tech, or deemed to be in violation of any of the provisions of the Code of Conduct as set forth herein.

Forsyth Tech recognizes the right of an enrolled student to receive a full opportunity to learn and develop, unfettered by any and all obstacles not conducive to a sound, fundamental educational program. To this end, Forsyth Tech recognizes, declares, and vests certain rights in each student enrolled at Forsyth Tech.

Student Rights

A. Legal Rights

All the rights and privileges guaranteed to every citizen by the Constitution of the United States and by the State of North Carolina shall not be denied any student. Furthermore, Forsyth Tech shall adhere to all of the statutes of the United States and State of North Carolina. Forsyth Tech has recognized the Student Government Association as the approved agency to voice students' opinions and speak on institutional policies concerning students' activities.

B. Rights of the Learner

The instructor in the classroom and in conference shall encourage free discussion, inquiry, and expression. Student performance will be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards.

C. Student Records

The Family Educational Rights and Privacy Act of 1974 (FERPA) provides safeguards regarding the confidentiality of and access to student records.

1. Students may review their educational records by making a written request to the director of Records and Recruitment.

2. Student records will not be reviewed by third parties unless permission is obtained in writing from the student. Exceptions may be made for instructors and administrators if the information is for educational purposes. Exceptions may also be made for parents who claim the students as dependents and for credentialing, auditing, or accrediting organizations. The dean of Student Development Services will make the final decision concerning access to records.

3. Official transcripts will be issued only when a written request is received from the student or upon written authorization by a student to be released to a designated entity. (See Family Education Rights and Privacy Act of 1974 on page 31 for additional information.) Transcripts from high schools or other colleges will not be released.

D. Freedom of Association

Students are free to organize and join an association organized or existing to promote the student's curriculum or career interest. Student organizations must be approved by the Student Government Association in order to ensure Forsyth Tech's policies and procedures are adhered to and followed.

E. Due Process

Due process procedures are established to guarantee the right of hearing, a presentation of charges, evidence for charges, the right of confrontation by the questioning of witnesses, and the right to counsel by the accused student, if so requested by the student. Any student aggrieved by the violation of this Code of Conduct shall have the right of appeal to the Student Appeals Committee as hereinafter provided.

General Campus Rules

The following is a general summary and classification of the major rules of student conduct, and any violation shall be considered a violation of this Code of Conduct. For purposes of Forsyth Tech rules and regulations, Forsyth Tech grounds are defined as any location owned, leased, rented, controlled, or otherwise occupied by Forsyth Tech or any division there of.

Rule 1. Disruption and Disorderly Conduct
A student shall not engage directly or aid and abet in disorderly conduct which is intended to provoke violent retaliation or cause a breach of peace or which disrupts, disturbs, or interferes with the normal routine activities or teaching of students, or which disrupts, disturbs, or interferes with the peace, order, or discipline on Forsyth Tech grounds.

Rule 2. Damage to or Destruction of Forsyth Tech Property
A student shall not intentionally, willfully or wantonly cause, or attempt to cause, substantial damage to be done to Forsyth Tech property, or shall not steal, or attempt to steal, Forsyth Tech property.

Rule 3. Damage to or Destruction of Private Property
A student shall not intentionally, willfully or wantonly cause, or attempt to cause, damage to private property of another, or shall not steal, or attempt to steal, private property of another when on Forsyth Tech grounds or while attending a Forsyth Tech activity, function, or event held off Forsyth Tech grounds.

Rule 4. Assault on or Verbal Abuse of Forsyth Tech Employee
A student shall not intentionally cause, or attempt to cause, physical injury, verbal abuse, harassment, or communicate a threat to a Forsyth Tech agent, servant, or employee at any time while such student is enrolled at Forsyth Tech.

Rule 5. Assault or Verbal Abuse of Persons Other Than Employees
A student shall not intentionally cause, or attempt to cause or threaten to cause, physical injury, verbal abuse, harassment, or communicate a threat, or direct any profane language toward any other student or Forsyth Tech guest, visitor, or invitee at any time while such student is

enrolled at Forsyth Tech, or while such student is on Forsyth Tech grounds or is attending a Forsyth Tech activity, function, or event held off Forsyth Tech grounds.

Rule 6. Weapons and Dangerous Instrumentalities-NC General Statute 14-269.2

It is unlawful for anyone to possess any weapon, whether openly or concealed, while on private school or public school property unless it is used as part of a school activity or ceremony. In essence, the statute refers to any and all property owned, used, or operated by any Board of Education, school, college, or university for the administration of any public or private educational institution. In practice, then, this statute permits prosecution of anyone carrying any dangerous instrument in school, on school grounds, or at any school activity.

Rule 7. Narcotics, Alcoholic Beverages, and Controlled Substances

A student shall not knowingly or negligently own, possess, use, transport or be at any time under the influence of any narcotic drug, alcoholic beverage or any other controlled substance (as controlled substance is defined by the North Carolina General Statutes or 21 U.S.C. subsection 812) while on Forsyth Tech grounds or during the time when a student is participating in any Forsyth Tech activity, function, or event off Forsyth Tech grounds. Use of any drug authorized by medical prescription from a registered physician shall not be considered a violation of this rule. However, students shall be held strictly accountable for their behavior while under the influence of prescribed medicines.

Rule 8. Classroom and Campus Activities

A student shall comply with all directions of teachers, student teachers, substitute teachers, teacher's aides, Forsyth Tech administrators, or authorized personnel during any time when the student is under the authority of Forsyth Tech personnel. A student on campus shall promptly identify himself to a Forsyth Tech official or campus public safety officer at all times upon reasonable request. A student shall appear before Forsyth Tech officials or disciplinary bodies when so directed. Any failure by any student to promptly and cheerfully obey or to abide by these regulations in this Rule 8 shall constitute a violation of this Code of Conduct.

Rule 9. Academic Dishonesty, Cheating, Forgery, and Related Offenses

It shall be a violation of Forsyth Tech Code of Conduct for a student to commit any one of the following acts:

1. Academic cheating, including, but not limited to, unauthorized copying of academic work of another, collaboration for use of notes or books on examinations without prior permission of the instructor.

2. Plagiarism or the intentional presentation of work of another without proper acknowledgment of the source.

3. Fabrication and falsification or the intentional misrepresentation of any information or citation in an academic exercise.

4. Submission of substantial portions of the same academic work for credit more than once without authorization.

5. Abuse of academic materials in the form of destruction, theft, or

concealment of library or other resource material or of another student's notes or laboratory experiments.

6. Complicity in academic dishonesty in helping or attempting to help another student to commit an act of academic dishonesty.

7. Furnishing of false information to any Forsyth Tech personnel including forgery, falsification, or fraudulent misuse of any documents, records, or identification cards.

Rule 10. State and Federal Laws

A student shall not violate any state or federal laws while on Forsyth Tech campuses or while attending a Forsyth Tech activity, function, or event off Forsyth Tech grounds.

Rule 11. Student Attire Code

Although Forsyth Tech students may dress informally, cleanliness and neatness of appearance must be maintained. Shirts and shoes are required at all times while the student is on campus or at all times while such student is attending a Forsyth Tech activity, function, or event off Forsyth Tech grounds. Special technical or vocational curriculums, such as the health curriculums, may require special attire for clinical or laboratory areas. A student shall not attend classes or laboratory work conducted in the clinical or laboratory areas if such student is in violation of the attire codes for such areas.

Rule 12. Involuntary Psychological or Psychiatric Withdrawal

It shall be grounds for dismissal if and when it shall be medically determined that a student poses a threat to the physical well-being of himself or others or if such student has a physical, mental or emotional condition of such a nature as to disturb or disrupt the normal and usual activi-

ties of other persons on campus. A student shall agree to have a psychiatric evaluation when it appears to the satisfaction of the president of Forsyth Tech, or her designee, that such examination is in the best interest of the student, or Forsyth Tech, or both.

Rule 13. Children in Classrooms or Shop Areas

Children are not allowed in classrooms or shop areas during class sessions, nor may they be left unattended in the library, canteen areas, or on campus grounds.

Rule 14. Roller Skating, Roller Blading and Skate Boarding

For the safety and well-being of all Forsyth Tech students, employees, and visitors, no one is permitted to roller skate, roller blade, or skate board on sidewalks, parking lots, or any other college property.

Violation of the Code of Conduct

The following are the degrees of disciplinary action which may be taken as a result of violation of the Student Code Conduct:

A. **Verbal Warning** - A verbal warning that the specific behavior/condition will not be continued or repeated or further disciplinary action will be taken.

B. **Warning** - A written notice to the student that continuation or repetition of specified conduct will be cause for further disciplinary action.

C. **Disciplinary Probation I** - A written reprimand to the student for violation of a specified rule, which may include exclusion from participation in a class or specified activities for a specified time as set forth in the notice.

D. **Restitution** - Reimbursement for damage to or misappropriation of

property. Reimbursement may take the form of appropriate service to repair or compensate for damages.

E. **Suspension** - Exclusion from class or classes and other student privileges or activities as set forth in the notice of suspension.

F. **Dismissal on Expulsion** - Termination of student status for a definite period of time. At the end of this period of expulsion, the student is eligible to apply through the dean of Student Development Services for consideration for readmission.

G. **Other** - Other types of discipline as set forth in campus rules and regulations consistent with the incident involved.

If as a result of a violation of the Student Code of Conduct a student is dismissed from class or classes, the student may receive a failing grade(s), and the disciplinary dismissal will be recorded on the student's transcript as an Administrative Withdrawal.

The conviction of a student of a criminal offense involving personal misconduct of a kind, which, if condemned by the college, would reflect dishonor or discredit on the college, shall be sufficient grounds for suspension or dismissal of such students.

Sexual Harassment Policy

Forsyth Technical Community College is committed to promoting an atmosphere in which all members of the college--faculty, staff, and students--may work free of sexual harassment and provides for an orderly resolution of complaints of sexual harassment.

All members of the college are expected and requested to conduct themselves in such a way that contributes to an atmosphere free of sexual harassment. Sexual harassment of any employee or student is a violation of the policies of the college, as well as state and federal law, and will not be tolerated. Anyone who violates this policy will be disciplined in accordance with appropriate disciplinary procedures.

Sexual harassment is defined as deliberate, unsolicited, unwelcomed verbal and/or physical conduct of a sexual nature or with sexual implications made by any employee or student when:

A. submission to such conduct is made either explicitly or implicitly a condition of an individual's employment, or academic or student status; or

B. submission to or rejection of such conduct by an individual is used as the basis for employment decisions or decisions regarding a receipt of grades affecting that individual; or

C. such conduct has the purpose or effect of interfering with an individual's performance; or creating an intimidating, hostile, or offensive environment in the workplace or the classroom.

Any student or employee who believes that he or she has been subjected to sexual harassment in violation of this policy should file a confidential complaint to the dean of Student Development Services for students; or the dean of Human Resources for employees. An investigation of these allegations will be conducted promptly and appropriate action taken.

Sexually harassing behavior may include offensive sexual flirtation, advances, propositions; continued or repeated abuse of a sexual nature; graphic verbal commentary about an individual's body; sexually degrading words used to describe an individual; and the display in the workplace or on campus of sexually suggestive objects or pictures.

Enforcement Procedures

Student conduct on a Forsyth Tech campus or student conduct during a Forsyth Tech activity, function, or event held off Forsyth Tech grounds that violates federal and/or state and Forsyth Tech regulations may be dealt with in the following manner:

1. The student may be turned over to the civil authority and subjected only to the penalties imposed by that authority; or

2. The student may be subjected to sanctions imposed both by the civil authorities and Forsyth Tech; or

3. The student may be subjected to sanctions imposed by Forsyth Tech notwithstanding the fact the civil sanctions may not be imposed.

Disciplinary Procedures

A. Instructional Areas

Any instructor may request a student to leave a class, laboratory, shop, or clinical area when, in the opinion of the instructor, the student's conduct or personal demeanor disrupts normal classroom activities. If the student refuses to leave the class, the instructor may call campus public safety for assistance. The instructor, identifying the student and the cause for dismissal from class, will immediately notify in writing the division dean and the dean of Student Development Services of actions taken.

The burden of requesting reentry to class, laboratory, or clinical areas will be upon the student involved. Request for reentry must be made to the instructor before the next class meeting. If the instructor decides that the student needs additional counseling before reentry, the instructor may require that the student meet with the division dean or the counseling staff for further discussion. If the division dean or the counseling staff decides that the student should be dismissed from the class or from Forsyth Tech, the instructor will send a written report (approved by the division dean) to the executive vice president for Instructional Services and the dean of Student Development Services. The executive vice president and the dean of Student Development Services will make the decision on dismissal when applicable and dismiss the student. The student will be given a copy of the report and a written notification of the decision. If a student wishes to appeal the decision, the appeal must be made by writing the Student Appeals Committee within twenty-four (24) hours after receiving the dismissal notice.

B. Noninstructional Areas

Any employee or student may file a written complaint for disciplinary action against any student enrolled at Forsyth Tech. The Public Safety Office may temporarily remove a student from campus when the student is jeopardizing the safety and security of faculty, staff, and/or the student body; a written complaint must then be filed. The complaint must be filed with the dean of Student Development Services, who will promptly investigate the complaint and make a decision regarding warning, suspension, dismissal, or other disciplinary action. Both the complainant and the student involved will be notified in writing. If the student wishes to appeal the decision of the dean of Student Development Services, the appeal must be made by writing the Student Appeals Committee within

twenty-four (24) hours after receiving the notice of the decision.

Student Appeals Committee

The Student Appeals Committee will hear the appeal of any student after the appeal process has been exhausted at the department and division levels for instructional areas or the dean of Student Development Services for noninstructional areas. The Student Appeals Committee will hear the appeal of any student regarding the following:

1. discipline;
2. dismissal, except for academic standing;
3. admissions;
4. residency;
5. discriminatory practices, including violations of Americans with Disabilities Act (ADA);
6. sexual harassment.

The appeal will be heard under the following conditions within two (2) working days of receipt of the confirmed appeal:

1. The student must submit a written statement containing factual and valid reasons for the appeal to the dean of Student Development Services, who will forward the statement of appeal to the committee chairperson. The chairperson may return the appeal to the student to clarify, to add factual information, or to state reasons for the appeal; the chairperson may reject the appeal if policies and procedures have not been followed by the student.
2. The committee will confine itself to making a recommendation on the appeal question and not on the validity of existing policies of Forsyth Tech. The committee reserves the right to suggest to the president that a current policy be examined for continued value to Forsyth Tech.
3. The committee will submit its recommendation to the president who will make a final decision and who will notify the parties involved.
4. In matters concerning residency classification, the committee's recommendation will be sent to the dean of Student Development Services, who will notify the parties involved of the decision. The next step in the appeal process is to the State Residency Committee. Procedures on state appeal are available in the dean of Student Development Services' office.
5. Records of the proceedings of the Student Appeals Committee are available upon written request to the dean of Student Development Services.
6. The student must obtain special permission from the executive vice president for Instructional Services to attend classes pending resolution of the case on appeal.

Definition of Academic Dishonesty

The following are further explanations of violations of Rule 9.

Plagiarism:

Definition: The intentional presentation of the work of another as one's own without proper acknowledgement of the source. The sole exception to the requirement of acknowledging sources is when the ideas or information are common knowledge.

Plagiarism as the result of misunderstanding or misapplying the rules of documentation may be unintentional but it is still plagiarism. Plagiarism includes but is not limited to:

a. Copying from a written source, another student, or a data base

(whether professional or nonprofessional; whether published or nonpublished) without proper citation in either a document or a speech.

b. Rewording (paraphrasing) or summarizing someone else's material without proper citation in a document or a speech.

c. Failing to cite word-for-word passages in a document or a speech.

d. Using purchased prewritten materials (including computer programs and files, research designs, distinctive figures of speech, ideas and images, or generally any information belonging to another) as the student's own or having someone else do the student's work.

Cheating:

Definition: Intentional use or attempted use of authorized materials, information, notes, study aids, devices, or other assistance in any academic exercise. This definition includes unauthorized communication of information during an academic exercise. Cheating includes but is not limited to:

a. Copying from another student's paper or receiving unauthorized assistance during a quiz, test, or examination.

b. Procuring without authorization tests or examinations before the scheduled exercise (including discussion of the substance of examinations and tests when it is expected it will not be discussed).

c. Copying reports, lab work, computer programs or files and the like from other students.

d. Collaborating on laboratory or computer work without authorization and without any indication of the nature and extent of the collaboration.

e. Sending a substitute to take an examination.

f. Receiving assistance in locating or using sources of information in an assignment where such assistance has been forbidden by the instructor.

Fabrication and Falsification:

Definition: Intentional alteration or invention of any information or citation in an academic exercise. Falsification refers to the alteration of information, such as altering research, clinical or practicum data. Fabrication refers to the invention or counterfeiting of information, such as inventing research, or clinical data, or records. It would also include altering grade reports or submitting false records for tardiness and absences for scheduled academic exercises. Altering a returned examination paper and seeking regrading also constitutes falsification.

Multiple Submission:

Definition: The submission of substantial portions of the same academic work (including oral reports) for credit more than once without authorization, including submitting the same paper for credit in two courses without instructor permission.

Abuse of Academic Materials:

Definition: Intentional destruction, theft, or concealment of library or other resource material, or of another student's notes or laboratory experiments.

Complicity in Academic Dishonesty:

Definition: Intentionally helping or attempting to help another to commit an act of academic dishonesty, such as those acts noted above. Collaboration and sharing information are characteristics of academic communities. These become violations when they involve dishonesty. Students should seek clarification when in doubt.

Policy on Compliance with the Americans with Disabilities Act

A policy on compliance with the American with Disabilities Act is in effect at Forsyth Technical Community College and published in the *Employee Handbook*. The Board of Trustees of Forsyth Tech intends to comply with the requirements of the Americans with Disabilities Act and provide access to education for persons with disabilities as part of the mission of the institution. The ADA coordinator for Forsyth Tech should be contacted with questions or concerns regarding the ADA.

Infectious Disease Policy

Forsyth Tech is committed to ensuring, as far as possible, that each employee and student enjoy safe and healthful work and/or study conditions. To this end, the college offers the following information for students and employees.

This policy information presents the procedures to be used by Forsyth Tech to protect those students and employees who may be exposed to infectious diseases and bloodborne pathogens. Bloodborne pathogens include, but are not limited to, the Human Immunodeficiency Virus (HIV), which is the causative agent for Acquired Immune Deficiency Syndrome (AIDS), and Hepatitis B Virus (HBV). These procedures are based on written requirements published in the Federal Register (29 CRF 1919.1030).

Persons infected or reasonably believed to be infected with communicable diseases shall not be excluded from enrollment or employment, or restricted in their access to the institution's services or facilities unless medically based judgments in individual cases establish that exclusion or restriction is necessary to the welfare of the individual, welfare of other members of the institution, or welfare of client, staff or students in a clinical area.

Persons who know or have a reasonable basis for believing that they have an infectious/communicable disease which may pose a threat to others have an obligation to conduct themselves in accordance with such knowledge, so as to protect themselves and others. Accordingly, employees should report this information to the dean of Human Resources, and students should report to the dean of Student Development Services. All information will be kept confidential except to those persons determined by the dean of Human Resources and the dean of Student Development Services as having a need to know. These persons will be informed after the individual is advised that such action will be taken.

It is the further declared policy of Forsyth Tech that its faculty, administration, and staff will conduct a continuing information program for all areas of Forsyth Tech personnel regarding communicable diseases and disabling illnesses.

Drug-Free Student Policy

Drug use and abuse by students have become immediate concerns in our society. These problems are extremely complex with no easy solutions.

The users of drugs may impair the well being of all students and the educational environment, and may damage Forsyth Tech property.

Therefore, it is the policy of Forsyth Tech that the unlawful manufacture, distribution, possession or use of a controlled substance is prohibited while on Forsyth Tech grounds.

1. Forsyth Tech does not differentiate between drug users and drug pushers or sellers. Any student who gives or in any way transfers or aids and abets in the transfer of a controlled

substance to another person or sells or manufactures or aids and abets in the sale or manufacture of a controlled substance while on Forsyth Tech premises will be subject to disciplinary action up to and including suspension from school.

2. The term "controlled substance" means any drug listed in the North Carolina General Statutes or 21 U.S.C. subsection 812 and other federal regulations. Generally, these are drugs which have a high potential for abuse. Such drugs include, but are not limited to, heroin, marijuana, cocaine, PCP, and "crack." They also include legal drugs which are not prescribed by a licensed physician.

3. The counseling staff will conduct mandatory drug awareness and education workshops for students each semester. Individual counseling sessions and educational materials will be available in the Counseling Center at all times.

4. The counseling staff will include in orientation sessions reference to drug policies, drug awareness, and sources for assistance.

5. The counseling staff will be available to lecture and assist instructional staff with class presentations to help educate students regarding the health risks of alcohol and drug abuse.

6. The counseling staff will have available referrals for treatment and more extensive assistance.

7. Student Development Services will assess the institutional environment annually by reviewing data from Public Safety, the Counseling Center, instructors, and other community resources to guide program development for students.

Crime Awareness and Campus Security Act

Staff, faculty, and students of Forsyth Tech are encouraged to report all criminal actions and other related emergencies to the Public Safety Office, located in the Carolina Annex. A special emergency number has been established. Staff, faculty, and students may dial Ext. 325 from any campus telephone (excluding public pay telephones) and receive immediate assistance. The special 325 number is publicized by stickers placed on each campus telephone. Pay telephones provided throughout campus locations are available for students to dial 911 for immediate assistance.

Upon receipt of a complaint, a Public Safety officer is assigned to the case. The complaint is documented, investigated, and processed by the investigating officer. If necessary, or where appropriate, an outside agency such as the Winston-Salem Police Department is contacted for assistance. Other staff of the college, such as the dean of Student Development Services, may also become involved where appropriate.

All complaints are reviewed and, where appropriate, action is taken by the director of Public Safety. Further review and action may occur up through the chain of command, including the president and Board of Trustees.

A Public Safety officer is on duty at all times regular classes are in session.

Computer Software Copyright Policy

Forsyth Tech purchases licenses for use of a wide variety of copyrighted computer software. The college does not own the copyright on this software or its related documentation and, unless authorized by the software developer or publisher, does not have the right to reproduce it.

According to the United States

Copyright Law, illegal reproduction of computer software can be subject to civil damages up to $100,000 and criminal penalties including fines and imprisonment.

Forsyth Tech does not condone the illegal duplication of computer software or the use of illegally duplicated software. College employees and students shall use computer software only in accordance with its licensing agreements. Any employee or student who makes, acquires, or uses unauthorized copies of computer software shall be subject to disciplinary action.

Services for Students

Accident Insurance

Accident insurance covering the hours a student is in school, on field trips, or participating in student activities is provided to all full-time and part-time students. The student insurance is furnished by Forsyth Tech as a service to students, but it is not meant to replace a student's personal coverage.

Bookstore

The bookstore is operated by Forsyth Tech as a service to students, faculty, and staff. Textbooks, school supplies, and course-related materials, as well as other items of special interest to students, are offered for sale. The bookstore is adjacent to the student center in Snyder Hall and is open Monday through Friday from 8:30 a.m. until 3:00 p.m., and Monday, Tuesday, and Thursday from 6:00 p.m. until 8:00 p.m.

The bookstore stocks as many texts as possible at the beginning of each semester, and students have the option to sell their used books at the end of each semester.

Full refunds are given during the first two weeks of each semester in accordance with policies posted in the store. Books must be unmarked and accompanied by the original sale receipt.

Book Return Policy

1. Last day of returns: two weeks from the first day of class (posted in store).
2. No refund without receipt.
3. No cash refunds on grants.
4. Books must be unmarked and in good condition.
5. Writing name in book will cause a $2 deduction from refund even if class is cancelled.
6. A wrongly purchased book can be exchanged for correct book only.
7. Optional study guides - no refund.

Books for continuing education courses are sold at the West Campus bookstore during specified hours at the start of each semester.

Summer semester evening hours will be posted at the bookstore.

Counseling Center

The Counseling Center maintains a staff of professional counselors whose services are available to students needing help with educational, vocational, financial, social, or personal problems from the time they enter school until they leave. Assistance is provided to facilitate wise choices, decisions, and adjustments associated with being a student. The counselors also serve as consultants to faculty and staff in helping to meet the educational needs of students. The counselors are available to both day and evening students in the Counseling Center.

Several individualized tests and inventories are available for counseling purposes, and students are referred to appropriate community agencies or resource persons when it is apparent that they can be assisted more effectively in this manner.

Instructors may refer a student who

is experiencing difficulties directly to the Counseling Center, or the instructor may request that the counselor contact the student for an appointment.

The counseling staff adheres to a policy of confidentiality for information disclosed in personal counseling sessions. However, exceptions may be made when students represent a danger to themselves or others, or if students disclose that they are involved in an illegal activity. Counselors generally do not have protection from disclosure in court.

The counseling staff adheres to the Ethical Standards of the American Counseling Association and the National Board for Certified Counselors.

Career Guidance Center

Professional counselors provide career exploration and planning assistance to individuals through the Career Guidance Center. Participation involves a group intake session which allows the counselor to evaluate the needs of each participant. A variety of available inventories helps the counselor and participant explore interest areas. Follow-up appointments provide personalized information.

Sources of occupational information are also available to assist in the exploration of career options. College information and catalogs can help in locating information on majors and schools.

Contact the Counseling Center for more information.

Food Service

A full-service cafeteria is located in the lower level of Hauser Hall. Vending services are available in Snyder Hall, Parkway Building, Carolina Building, Greene Hall, Allied Health Building, and West Campus.

Special Provisions for Persons with Disabilities

It is the intent of Forsyth Tech that all courses of study be accessible to qualified students. Persons with documented disabilities should provide approximately one semester's advance notice to the Testing/Special Services/ADA coordinator in order to identify any special equipment needs and to facilitate adjustments in curriculums, facilities, or schedules, if needed.

Special services currently available for persons with disabilities include, but are not limited to: tutors, readers, and notetakers; a TT (text telephone); staff members with basic manual language skills; taped texts; adapted computer equipment; and modification of placement test administration. These free services may be arranged in the Testing Center and in the Learning Center. Students who require attendant care are responsible for their own arrangements.

Health Services

Limited health services are provided through the Public Safety Office. First-aid supplies are located in shop areas; however, injuries requiring more than minor first-aid will be treated in the emergency room of either Forsyth Memorial Hospital or North Carolina Baptist Hospital.

Housing

Since Forsyth Tech has no dormitory facilities, students who wish to live away from home must make their own housing arrangements. Forsyth Tech takes no responsibility for locating or supervising student housing; however, suggestions as to location of off-campus housing may be obtained in the Counseling Center.

Learning Center

The Learning Center offers the following services and programs, all designed to help increase the success rate for students and to assist the faculty. For more information, contact the Learning Center.

Courses - The Learning Center offers 16 courses that students take under the direction of an instructor. The students cover the subject material at their own pace, using programmed texts and supplementary materials. When students need help they receive extended individual attention from the instructors.

Studying in the Learning Center offers students flexibility in scheduling: the center is open from 8:00 a.m. to 9:00 p.m., Monday through Thursday, and 8:00 a.m. to 2:00 p.m. on Friday. Students can attend class during any of these times, enabling them to work around outside commitments such as job and family demands. The Learning Center also offers an alternative if a classroom course is full or is cancelled.

Perhaps the greatest advantage of taking a course in the Learning Center is the sense of satisfaction and self-confidence that develops from working successfully in an individualized setting.

Tutoring Services - Tutoring Services offers several methods for helping students who are having academic difficulties. Tutoring is done in one-to-one or small group sessions 2 or 3 times a week. Tutors are primarily fellow students who have received training. Students can get help in virtually every academic course offered on the main campus. The Learning Center also has math, science, reading and basic writing skills labs, all staffed by well qualified lab assistants. Students can use these labs on a drop-in basis. Both tutoring and lab help are free to the students, but the students must be referred by their instructor. Another service to help students is a variety of workshops on learning skills, conducted by Learning Center staff.

The various tutoring services share the goal of helping Forsyth Tech students become independent, lifelong learners and increasing retention rates.

Computers for Writing Papers - The Learning Center has pc's for students to write class papers, reports, assignments, etc. This free service is available to any enrolled student doing class-related work.

Placement Test Preparation - Most people entering Forsyth Tech are required to take a placement test. To help these people, the Learning Center offers worksheets, practice tests, and tips on test taking. This service is especially helpful for people returning to school after a long absence.

Services for Instructors - The Learning Center has several services for instructors. The Center can administer make-up tests for instructors whose students miss a test; it houses and distributes the materials for the business telecourses; and it can provide special accommodations to help instructors comply with the Americans with Disabilities Act.

Libraries

The two libraries contain approximately 32,000 books and audio-visual software. Accompanying audio-visual hardware is available for use in the libraries and classrooms.

Main Campus Library - The library, located in Ardmore Hall, is open Monday through Thursday from 7:30 a.m. until 9 p.m. and on Friday from 7:30 a.m. until 3 p.m.

Although no fines are charged, students are responsible for replacing books that are lost or damaged. Until replacement is made, library privileges

will be revoked; the student will not be permitted to register, and the student's records will be sealed.

Allied Health Library at North Carolina Baptist Hospital - The library at the Allied Health Building is located on the first floor. It is open Monday through Friday from 8 a.m. until 5 p.m. This library serves all allied health curriculums.

Lost and Found Service

Lost and found articles on the main campus are handled by the Public Safety Office. On other campuses, the libraries in the Allied Health Building at the North Carolina Baptist Hospital and the Information Registration Center on West Campus will handle lost and found articles. All lost articles of value should be reported to the Public Safety Office.

Employment Assistance Center

The Employment Assistance Center offers services free of charge to area employers, current students, and graduates of Forsyth Tech. Each year the EAC receives over 1,000 job listings from area employers. Students and graduates who register with the EAC have access to these listings.

In addition, a representative from the Employment Security Commission of NC (ESC) is available in the EAC to work exclusively with Forsyth Tech students and graduates. Students who register with the on-campus ESC representative have access to local, state, regional, and national job opening information.

The Employment Assistance Center also provides the following services to current students and graduates: individual career counseling, help in writing resumes and cover letters, interview preparation, and handouts and resource materials on job search skills and job market information.

Student Centers

A student center is located on the ground level of Snyder Hall. Students are encouraged to use the center as a place to meet, talk, eat, and relax.

A student lounge is available to students in the health curriculums in the Allied Health Building at the North Carolina Baptist Hospital.

A student lounge and cafeteria are available in Hauser Hall on the ground floor.

Guidelines for Telephone Calls to Students

Students cannot receive telephone calls or messages at school except for an emergency. Forsyth Tech does not have the facilities to forward general messages to students. Relatives, friends, and associates should be asked not to contact students at school. In case of an emergency, however, the staff will make every effort to relay information to students. Those calling in an emergency will be asked to state the nature of the emergency, give a name, and a return telephone number. It is the policy of Forsyth Tech not to give out identifying information about students to telephone callers and/or unidentified persons without the permission of the student (Family Rights and Privacy Act.)

The Records Office only handles inquires concerning students records. Emergency calls should be directed to the operator, the Counseling Center, Public Safety, or the appropriate dean's office.

Use of Facilities

The buildings and their contents exist solely for the education of Forsyth Tech's adult population. The use of the facilities for any other purpose is strictly prohibited. Any use of these facilities for personal gain will result in immediate disciplinary action.

Smoking is prohibited in all classrooms, laboratories, shops, and auditoriums.

Animals are prohibited inside the buildings. Any animal on the campus grounds must be on a leash in compliance with the City of Winston-Salem Leash Law Ordinance Section 3-18.

Children are not allowed in classrooms or shop areas during class sessions, nor may they be left unattended in the library, canteen areas, or on campus grounds.

JTPA Participant
Service Center

Forsyth Tech has received funding through JTPA (Job Training Partnership Act) to operate the Participant Service Center. It is designed to improve the employability of participants enrolled in an approved curriculum by assisting them in overcoming barriers to employment due to educational and skill-training deficiencies. Emphasis is placed upon the importance of job survival skills, positive work attitudes, job development and placement at program completion. Interested persons may contact the JTPA coordinator.

Single Parent/Displaced
Homemaker

The Single Parent/Displaced Homemaker program at Forsyth Tech provides child care assistance, other direct support (tuition, books, transportation, etc.), counseling and workshops for full- or part-time students who are single parents, single pregnant women, or displaced homemakers enrolled in degree, diploma, or general technology curriculums. The program is intended to give eligible students the flexibility to plan and complete a training program in order to become economically self-sufficient. However, those students who do not meet eligibility requirements or who do not need funding may receive counseling and attend workshops. The Single Parents/Displaced Homemaker coordinator maintains a tracking system which identifies and attempts to eliminate barriers to education for single parents/displaced homemakers. During the admissions process, single parents or displaced homemakers, should contact the coordinator to schedule an interview.
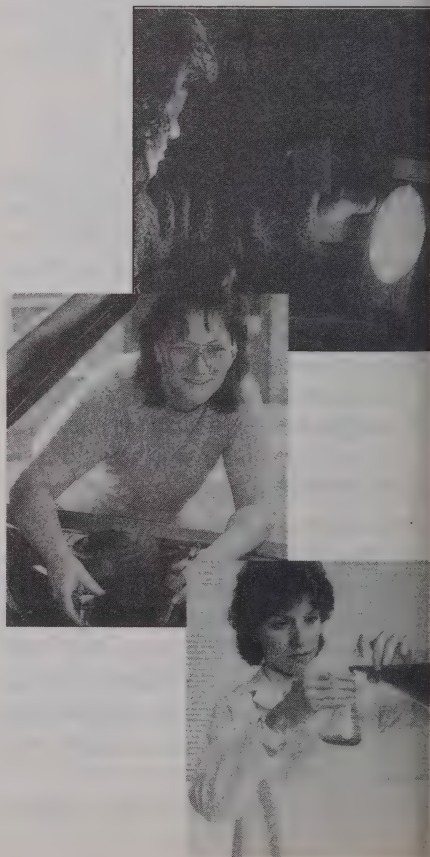
Student Clubs and Organizations

Student Government Association (SGA)

The Student Government Association serves to promote interest in student affairs both on and off campus. The association is composed of all students who pay the student activity fee. Three representatives are selected from each of the instructional divisions to serve on the Executive Council. Representatives to the Executive Council elect the SGA officers from within the Executive Council. The Student Activities facilitator serves in an advisory capacity to the Student Government Association.

Student Representation on the Board of Trustees and Committees

The president of the Student Government Association is a nonvoting member of the Board of Trustees of Forsyth Tech. Student representatives also serve on the Student Appeals Committee, the Graduation Committee, and other committees concerned with students.

Student Activities

Forsyth Tech strives to offer its students more than just an academic education. Efforts are made to provide students with extracurricular opportunities for involvement that will help to educate the total individual. By providing extracurricular activities, Forsyth Tech recognizes that a college education includes social, professional, and cultural involvement as well as academics. Students are invited to come by the Student Activities Office in Snyder Hall to find out more about what Forsyth Tech has to offer outside the classroom.

Student Organizations

Architectural Technology Club

Data Processing Management Association

Future Advocates for Children Tomorrow

International Cultural Exchange

Instrument Society of America

Law Enforcement Administration Society

Paralegal Club

Philosophical Society

Society of Respiratory Care Students

Student Medical Sonographer's Club

Student Practical Nurse Organization

Forsythia, annual student prose/poetry publication

Student Leadership

Ambassador Program

Flight Line Program

Phi Theta Kappa

Student Government Association

Recreational Clubs

Coed Bowling League

Coed Golf Team

Coed Tennis Team

Coed Volleyball Team

Men's Basketball Team

Women's Softball Team

Student Financial Services

The Purpose of financial aid is to provide monetary assistance to eligible students who would otherwise be unable to continue their education. The college will make every effort within available financial aid resources to assure that qualified students will not be denied the opportunity to attend college because of a lack of adequate funds to help meet educational expenses. Although the student and the student's parents are primarily responsible for financing a college education, financial assistance may be available to a student in the form of federal and state grants, scholarships, work-study, and loans. Students who realize they will not be able to meet college expenses must take the early initiative in seeking information regarding financial assistance.

Students applying for financial aid must complete the Free Application for Federal Student Aid (FAFSA). Information and applications may be obtained from Student Financial Services. Applications must be filed annually. The FAFSA is available after January 1 of each year for the following academic year. The student will receive a Student Aid Report (SAR), which should be submitted to Student Financial Services. At that time, the office will inform the student of required documentation to complete the student's financial aid file.

It is recommended that applications for student aid at Forsyth Tech be submitted no later than March 1 preceding the academic year for which aid is requested. Applications submitted after March 1 will be processed; however, funding for many programs is limited. Late applications may find most funds already obligated.

Financial aid will not be awarded to any student until all admissions requirements are met.

Most one-and two-year programs of study are eligible for financial aid. Students enrolled in the following curriculums/programs are not eligible for financial assistance:

Certificate in
  Computed Tomography
  General Education Technology
  Health Care Technology
  Information Systems Technology
  Information Systems Technology -
    Internet
    Help Desk
    Programming
  Magnetic Resonance Imaging
  Manufacturing Engineering
    Technology
  Office Systems Technology
  Real Estate Appraisal
  Real Estate
  Welding
Developmental Education
Special Credit

Eligibility for Aid

Most awards are based on financial need. This is determined by subtracting the Estimated Family Contribution (EFC) as reported on the student aid report (SAR) from a student's educational costs. Other requirements may be established by the agency or individual making the funds available.

The student has an obligation to maintain the Satisfactory Academic Progress Requirements as defined by the U.S. Department of Education and this institution specifically for financial aid recipients. Each financial aid recipient is

provided a copy of the policy upon notification of award. A copy of the requirements can be obtained in Student Financial Services. Failure to maintain academic progress will result in the termination of financial assistance. Eligibility may be regained by reestablishing satisfactory academic progress.

Financial aid recipients must notify Student Financial Services of any change in enrollment status, program of study, or address. Financial aid from outside sources should be reported as well to prevent over awards.

Disbursement of Aid

Students approved to receive financial assistance will receive an award letter detailing the types and amounts of aid awarded for the 33 week academic year. All financial aid recipients are notified in writing of registration procedures and are provided a disbursement schedule of all funds for the academic year.

Diploma curriculums and programs that do not lead to an associate degree are subject to the federal regulation of clock/credit hour conversion. Therefore, students may find their award amount has been adjusted to meet these guidelines.

Refund Policy - Financial Aid

Recipients of Federal Pell Grant funds who find it necessary to withdraw before attending classes will have 100 percent of their tuition charges refunded to the Federal Pell Grant account. If the recipient has attended classes but withdraws prior to the 20 percent point of the semester, 75 percent of the tuition charged to the Federal Pell Grant account will be refunded.

Students who are attending Forsyth Tech for the first time and who charged educational expenses using Federal Pell Grant funds will be subject to the statutory pro-rata refund policy. Tuition, fees, and textbooks charged for a first-time student will be refunded to the Federal Pell Grant account based on the week of the semester that the student withdraws up to the 60 percent point of the semester.

PLEASE NOTE: All policies and regulations pertaining to federal and state aid are subject to change in order to meet regulations as changed by either the Department of Education or other entities.

Grants

Federal Pell Grants

The Federal Pell Grant program is a federal entitlement program designed to provide financial assistance to eligible students to attend post-secondary educational institutions. Students may apply by completing the Free Application for Federal Student Aid. Applications may be obtained in Student Financial Services. Students should allow at least six weeks for processing.

Federal Supplemental Educational Opportunity Grant

The Federal Supplemental Educational Opportunity Grant (FSEOG) is funded by the federal government and is awarded to the neediest students who are Federal Pell Grant eligible and demonstrate a low family contribution.

Federal Workstudy Program

The Federal Workstudy program is a federally supported program through which students, primarily from low income families, are given positions on campus for part-time employment (generally up to 20 hours per week). Students must be enrolled at least half-time and maintain satisfactory academic progress to be eligible for workstudy.

North Carolina Student Incentive Grant

The NCSIG is a state program administered by College Foundation, Inc. from state and federal funds provided through the State Education Assistance Authority for students who demonstrate substantial financial need. It is open to North Carolina residents attending Forsyth Tech full-time and who apply by March 15.

Loans

Loans at a low rate of interest are available through the following agencies:

Sloan S. Sherrill Nursing Loan Fund
Winston-Salem Foundation
    (Available to Forsyth County
    residents only)
North Carolina Student Loan Program
    - Health, Science, and Mathematics
North Carolina State Education
    Assistance Authority - NESLP and
    NSP
Federal Family Education Loan
    Program

Sloan S. Sherrill Nursing Loan Fund

The Sherrill Nursing Loan is an interest-free loan made through Forsyth Tech for second-year Associate Degree Nursing students. For more information and applications, students should contact Student Financial Services by May preceding the academic year for which a loan is requested.

North Carolina Nurse Education Scholarship/Loan Program

The NESLP Program was designed to address the shortage of trained nurses practicing in North Carolina. Funds are available for study in nurse education programs located in North Carolina that lead to a degree (ADN) or a diploma (PN). Funding is contingent upon appropriations by the General Assembly of North Carolina. All scholarship/loans made under the NESLP are based on demonstrated financial need. Contact the Student Financial Services for more information.

Nurse Scholars Program

The Nurse Scholars Program (NSP) is a competitive scholarship/loan. Financial need is not a criterion. An eleven-member Nurse Scholars Commission, created by the General Assembly of North Carolina, developed the selection criteria and the method of selection, and selects recipients on a statewide basis.

Students interested in learning more about the Nurse Scholars Program can contact either the State Education Assistance Authority or Student Financial Services between January 1 and April 20. The deadline for submitting applications to the state is usually May 1 of each year.

Federal Family Education Loan Program

Students who wish to be provided with more information regarding FFELP including subsidized and unsubsidized Stafford Loan or the PLUS (Parent Loans for Undergraduate Students) programs are advised to ask Student Financial Services.

Scholarships

Students are encouraged to contact Student Financial Services for additional information and application criteria for the scholarships listed below.

The R. D. Boyer Scholarship Fund is awarded annually, based on financial need, to a student pursuing a career in

construction occupations.

The Sprint/Carolina Telephone Scholarship is awarded annually to two students. Priority is given to unemployed and/or minority students.

The Corn Products Scholarship is awarded annually to students entering the second year of a business-related curriculum. The scholarship is for Forsyth County residents only and is based on academic ability and financial need.

The Don Angell Nursing Scholarship is awarded annually to an ADN or PN student. Priority is given to an employee of Angell Care, Inc.

The Mary Kate Dixon/ Winston-Salem Garden Study Club Scholarship is awarded annually to an outstanding student entering the second year of the Horticulture Technology curriculum.

The Medical Alliance of the Piedmont awards scholarships to students entering the Associate Degree Nursing and allied health curriculums.

The Forsyth Technical Community College Bookstore Endowment Scholarship awards academic scholarships for certain curriculums as well as providing tuition assistance and emergency funds for those students deemed as demonstrating financial need by Student Financial Services. All awards are based on available funds.

The Norman Gaddis Scholarship is sponsored by the Student Government Association. It is primarily an emergency scholarship for students eligible for financial aid when funds are not available from other sources.

The Sandra Johnson Memorial Scholarship is awarded annually to an outstanding student entering the second year of Administrative Office Technology.

The 1990 Student Government Association/Tom Mayerchak Scholarship is awarded annually to a deserving student entering the second year of a technical or College Transfer curriculum. This program also awards three need-based scholarships and provides funds for emergency use.

The Marshall Paul Johnston Scholarship is a perpetual scholarship available to Automotive Mechanics students.

The Winston-Salem Kiwanis and the Twin City Kiwanis Clubs award scholarships annually to graduating high school seniors.

The Mary B. Lauerman Memorial Scholarship is awarded annually to the full-time student with the highest cumulative GPA entering the second year of Associate Degree Nursing.

The Randall R. Jones Scholarship is awarded quarterly to the Machinist student with the highest GPA.

The National Tooling and Machining Scholarship is awarded at the beginning of the third, fifth, and seventh quarters to the full-time evening machinist student with the highest GPA at the beginning of each of the three quarters.

The Modern Machine Scholarship is awarded annually to a deserving student in the Welding curriculum and is based on academics and need.

The Jane Gaither Murray Scholarship is awarded annually to a deserving student entering the Associate Degree Nursing curriculum.

The North Carolina Community College Scholarship is awarded annually, with priority given to unemployed and/or minority students.

The Lynne Breedlove O'Rourke Memorial Scholarship is awarded annually to an outstanding student entering the second year of the Radiography curriculum.

The Mr. and Mrs. Henry F. Snyder, Sr. Scholarship is a need-based scholarship for students in all programs. Priority is given to males in allied health programs.

The Southern Bell Telephone Scholarship is awarded annually to two full-time students. Priority is given to applicants with the highest financial need and applicants whose job skills have become obsolete due to economic recession.

The Wachovia Technical Scholarship is awarded annually to three students who are enrolled full-time in the second year of a technical curriculum and is based on need and scholastic promise.

The Lettie Pate Whitehead Foundation Scholarship is awarded annually to nursing and allied health students who have demonstrated need through Student Financial Services. Awards are made as long as funds are available.

The Louise G. Wilson Scholarship is available to poverty-level Forsyth County residents who are accepted or enrolled in the diploma or technical curriculums.

The Rufus Dalton Memorial Scholarship is a need-based scholarship for nursing students.

The Friends of the College Scholarship is a need-based scholarship for all programs.

The Integon Scholarship is awarded to students in the third quarter of the Administrative Office Technology program who have at least a 2.30 GPA.

The Clara K. Martin/Winston-Salem Soroptimist Club Scholarship is an academic scholarship awarded to the female with the highest GPA entering the second year of the accounting program .

The RJR Archer Scholarship is an academic scholarship for students in Manufacturing Engineering Technology, Electronics Engineering Technology and Drafting and Design Engineering Technology.

PLEASE NOTE: In addition to the scholarships listed above, there are various individuals and organizations who contribute money yearly for scholarships to needy students. Most of the money available is not restricted; however, some of the scholarships are restricted to individuals enrolled in specific curriculums. Contact Student Financial Services for specific information regarding all federal, state, and local funds.

Other Sources of Aid

Other sources of aid not administered by Forsyth Tech are available for eligible students. Interested students should apply with the appropriate agency. Student Financial Services can assist the students in making the initial contact with the sources listed below:

North Carolina Veterans Affairs Scholarships

North Carolina Vocational Rehabilitation

North Carolina National Guard Tuition Assistance Plan

Job Training Partnership Act (JTPA) Dependency and Indemnity Compensation (VA)

Winston-Salem Foundation

Veterans Benefits

All one-and two-year programs of study offered at Forsyth Tech are approved for the training of persons eligible for benefits administered by the Veterans Administration (VA).

The Admissions Office will help applicants select a program of study and explain the procedures for enrolling in Forsyth Tech. Admissions will require application forms, testing, and the receipt and evaluation of transcripts for all prior training.

Veterans should contact Student Financial Services to make application for their VA benefits.

An enrollment certification will be transmitted to the Veteran Affairs Regional Office after the new student registers and pays for classes. Tuition, books, and fees must be paid by the veteran upon registration. Forsyth Tech cannot postpone the payment of fees until veterans receive payments of their educational benefits. Educational benefits will be paid directly to the veteran.

Veterans are responsible for being familiar with the information found in the *Student Handbook, College Catalog,* and all veterans brochures and information obtained in Student Financial Services.

Hours of Pay

Veterans benefit payments are issued monthly and are based on training for a prescribed number of credit hours per semester.

Full-time . . .12 or more credit hours
3/4 time . . . . 9-11 credit hours
1/2 time . . . . .6-8 credit hours
Less then 1/2 time . .1-5 credit hours

Standards of Progress

Federal regulations require that students receiving veterans benefits must maintain standards of academic progress and conduct.

Satisfactory Academic Progress

The Academic Standing section of the *Student Handbook* describes the basic academic requirements for all students. A 2.0 cumulative GPA must be maintained, and a probationary period of not more than one semester is permitted. Progress is reviewed each semester, and performance in the major subject areas and preparatory/refresher classes is considered as well.

If a veteran or eligible person is classified as making unsatisfactory progress, a report will be submitted to the Veterans Administration and benefits will be terminated. Termination will take place effective with the posting of grades at the end of the probationary semester. Recertification will not be made until satisfactory progress has been established by the veteran's regaining a 2.0 cumulative GPA. Students should request recertification to Student Financial Services following the quarter in which satisfactory progress has been regained.

Satisfactory Conduct

Conduct in accordance with the section on Student Conduct and Responsibilities is expected of all students. Dismissal of veterans or eligible persons for unsatisfactory conduct will be reported to the Veterans Administration and benefits will be terminated.

Satisfactory Attendance

All students are expected to maintain satisfactory attendance as defined in the section on attendance. Eligible persons dropped from courses for nonattendance, poor attendance, or those who withdraw, will be terminated or have their hours reduced effective with the last day present in class. Unless special circumstances are involved, the Veterans Administration may determine this termination or reduction to be an overpayment retroactive to the beginning of the semester.

Punitive/Nonpunitive Grades

Federal regulations prohibit payment for grades that do not count as progress toward graduation. Audits are not payable. A grade of WF is punitive because it counts as an F in GPA computation. A grade of W or WP is nonpunitive. If an eligible person receives a grade which reduces training time, a report is submitted to the Veterans Administration. In the case of punitive grades, the effective date of adjustment is the last day present in class. In the case of nonpunitive grades, the effective date of adjustment may result in an overpayment retroactive to the beginning of the semester, unless special circumstances are involved.
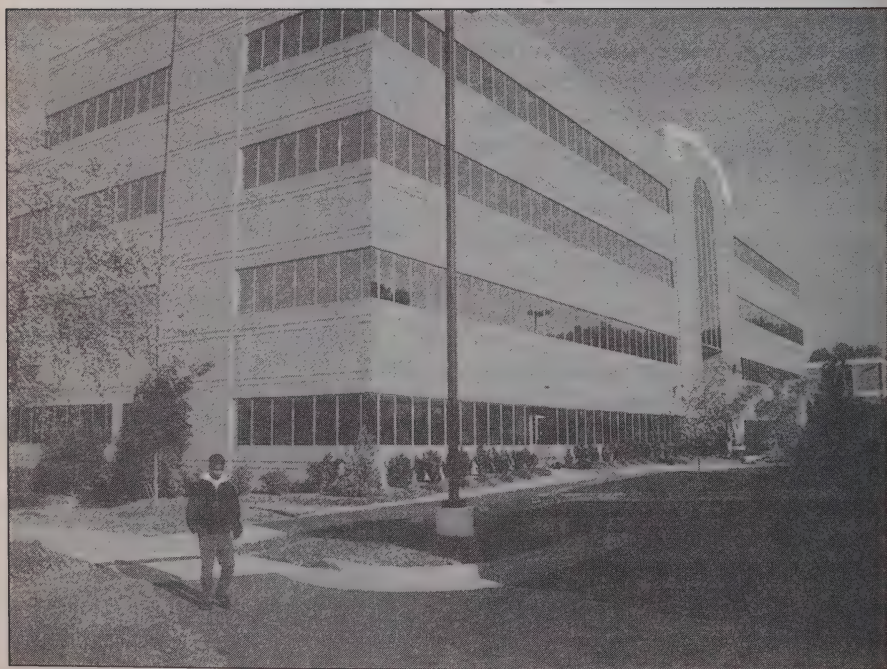
Corporate & Continuing Education Services

Corporate & Continuing Education
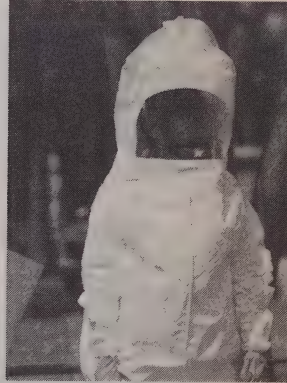
Promoting **Personal & Professional** Development

Corporate & Continuing Education Services of Forsyth Tech promotes the personal and professional development of individuals and employee groups by offering educational courses, seminars, and services. In addition to providing occupational related and community service courses, it also offers adults the opportunity to earn a high school diploma or a General Educational Development (GED) certificate. Courses and seminars vary from a few hours in length to several hundred hours, depending on their purpose and content, and are conducted on campus and at other convenient locations. Courses and seminars for the general public are developed and advertised in schedules and flyers on a routine basis. Others are developed and customized for the employee groups of client companies and, as a result, are not open to the general public. Corporate & Continuing Education instruction generally includes a combination of lecture, demonstration, and practical application and may be delivered in either a traditional or a distance learning classroom.

Corporate & Continuing Education offers a broad range of educational services, including basic skill and developmental assessments, GED testing, testing for professional licenses and certifications, training needs assessments, job task analyses, and work skill assessments. Services to promote business and industrial development are offered through five specialized programs: the Small Business Center, Focused Industrial Training, Occupational Extension, New and Expanding Industry, and Human Resource Development. Other specialized services are developed as needed to respond to the personal or professional development needs of Forsyth and Stokes County residents.

Corporate & Continuing Education maintains three primary educational facilities in Forsyth County: the Forsyth Tech West Campus, the Forsyth Tech Fourth Street Downtown Center, and the Forsyth Tech Fifth Street Library Center. West Campus is located at 1300 Bolton Street and contains a corporate training center as well as classrooms for adult basic skills, community service, and occupation-related educational programs. Registration for most of the Division's general public courses and seminars is conducted at West Campus.

The Forsyth Tech Fourth Street Downtown Center is located at 601 West Fourth Street, Winston-Salem, adjacent to the Winston-Salem Chamber of Commerce. Training to meet the needs of downtown employees in the general areas of computer technology, management, small business development, and communication skills is conducted at the Downtown Center.

The Forsyth Tech Fifth Street Library Center is the result of a cooperative effort with Forsyth County Libraries. The county's main library, located at 660 West Fifth Street, Winston-Salem, donated facility space to the college to establish the Fifth Street Center. The Small Business Center, a computer lab, and a general classroom are located at the Center. In cooperation with the Library, the college offers a variety of programs at this site to meet the personal and professional development needs of the downtown Winston-Salem communities.

Mission

The mission of the Corporate & Continuing Education Division is to work in partnership with the community to identify and meet adult education and training needs for lifelong learning, economic development, and improved quality of life.

The general program objectives are:

1. to provide expanded educational opportunities for those adults who would not otherwise continue their education,
2. to provide relatively inexpensive, convenient educational opportunities for adults regardless of educational background,
3. to provide programs of vocational/technical education for employed and unemployed adults who need training or retraining,
4. to provide short courses that will meet the general adult and community service needs of the people in the community,
5. to provide requested vocational and technical training programs for new and expanding industry in the Forsyth Tech service area and
6. to provide small business development, educational programs, and services for establishing prospective businesses.

Admission Requirements

Corporate & Continuing Education courses and seminars are generally for adults eighteen years of age and older. However, individuals 16 and 17 years of age may enroll in some courses if they first obtain approval from the public school system. Some courses require a student application and prospective students should inquire about admission requirements for specific programs of interest. Inquiries can be made at the Forsyth Tech West Campus.

Course Fees

Most Corporate & Continuing Education courses have associated course fees; some do not. A registration fee, an equipment usage fee, and an insurance fee are some of the typical fees associated with courses and seminars. In addition, students may be required to purchase a textbook or to pay an instructional materials fee. If attending class on the college's Main or West campuses, students will be required to purchase a Forsyth Tech parking sticker.

Some seminars, such as Small Business Center ones, and some classes, such as Human Resource Development, Basic Education, and English as a Second Language, do not charge a registration fee.

Some individuals are exempt from paying registration fees. Volunteer firemen, fire department personnel, volunteer rescue and lifesaving department personnel, and local law enforcement officers are not required to pay registration fees for certification and occupation-related courses. Individuals 65 years of age and older are not required to pay registration fees for most courses and seminars. However, they are required to pay fees for any designated as "self-support".

CEU Credits

Corporate & Continuing Education course are approved for Continuing Education Units. CEU credit is based upon the number of hours a course is scheduled to meet. One CEU is awarded for every ten hours, and any portion thereof, a person attends class. (For example, a course that meets for 22 hours awards 2.2 CEUs.)

Educational Services

Basic Skills Assessments

It is often useful to determine the basic skill levels of employees prior to developing a customized training program. Validated assessment instruments are used to identify the math, reading, language, and spelling competence of employees. The information gained can be used to determine if the basic skill levels of employees need to be upgraded for them to become fully job functional. The basic skill assessments can be done in either English or Spanish, and classes to help employees improve their basic skills can be conducted on site.

Customized Training

Each customized training program is client-driven, that is, course content, schedule, methodology, and location are based on client needs and preferences. Training programs can be developed to upgrade the skills of existing employees or to recruit and train participants for potential employment with specific companies. Forsyth Tech's customized programs are developed to make a long-lasting contribution to employee growth and productivity.

Training Needs Assessments

Obtaining input from managers and different employee groups about what they perceive as their training needs is an important first step in developing customized training programs. The primary purpose of conducting a training needs assessment is to identify gaps between the current and desired levels of employee performance, knowledge, and skills. The secondary purpose is to gain an understanding of strategies that can be used to close the gap.

Job Task Analyses

A multi-step process, job task analyses are conducted to identify the tasks associated with specific jobs and the knowledge and skills needed for employees to perform the tasks adequately. Job task analyses provide insight into why some employees perform adequately while others perform inadequately and provide sound data for developing customized training programs.

Professional Development

Apprenticeship

Apprenticeship programs consist of a prescribed series of courses an employee can complete to attain a high skill level in a specific occupation such as tool and die making or electrical maintenance. Apprenticeship programs can be approved by the company or both company and N.C. Department of Labor approved.

Computer Technology

A wide variety of computer courses are offered on a routine basis to the general public. The course can also be arranged for employee groups so that company-specific applications can be taught. The college has up-to-date computer labs at four primary locations in Winston-Salem: the Downtown Fourth Street Center, the Fifth Street Library Center, West Campus, and Main Campus.
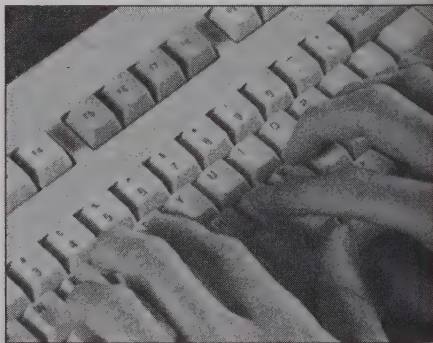
Computer Courses

- AutoCAD
- How to Buy a Computer
- Internet
- Microsoft Office
- Excel Worksheets
- PowerPoint
- PageMaker
- Windows 95
- DOS
- How to Turn on a Computer
- Keyboarding
- Word I and II
- Excel Charts/Data
- Access
- PCs & Windows 3 or 95
- Transition to 95
- Harvard Graphics
- Lotus 123
- Excel
- Integrating Documents
- Microsoft Works
- WordPerfect

Employee Health & Safety

Forsyth Tech offers several courses in employee health and safety. The courses are approved by the appropriate agency; several are developed to specifically meet OSHA and/or occupational credentialing requirements. Upon successful completion of health-related courses, participants often receive a certificate. An official copy of course completion is also maintained on participant transcripts.

Health & Safety Courses

- CPR Right to Know
- First Responder
- Alarms & Evacuation
- Emergency Medical Technician
- Bloodborne Pathogens
- Fire Extinguishers Security Procedures
- Forklift Safety
- Ergonomics
- Self Defense
- First Responder
- First Aid, CPR/First Aid
- Confined Space Entry
- Hazardous Materials
- Trench Rescue

Employee & Organizational Effectiveness

For organizations to be competitive, they must have employees who strive to improve work processes and enhance product quality. For employees to be effective, they need to know, in addition to technical skills, how to provide feedback in both written and oral form, participate in problem analysis and solving, work as a team member, and lead others in team or supervisory situations. They also need to understand the concepts of quality and continuous improvement and how to attain quality and customer satisfaction. The college offers a variety of courses in the field of employee and organizational effectiveness and draws on the expertise of experienced instructors to deliver customized programs.

Employee Effectiveness Courses

- Self-Directed Work Teams
- Listening Skills
- Fostering Improvement Through Innovation
- Basic Math
- Managing Changes
- Basic Reading
- Coaching for Optimal Performance
- Problem Solving
- Team Decision Making
- Team Goal Setting
- Myers-Briggs Personality Indicator
- Responding to Customer Complaints

Leadership Skills

- Principles of Supervision
- Human Resource Management
- Personnel Law

Conducting Employee Reviews
Diversity in the Workplace
Coaching for Success
Ethics: Leading by Example

Written and Oral Communication Courses

Basics of Customer Service
Review of Basic Punctuation and
    Grammar
Sign Language
Developing Company Manuals
Letter and Memo Format
Effective Telephone Communication
Proposal/Grant Writing
Giving & Receiving Feedback
PowerPoint Presentations
Proofreading for Zero Defects
Improving Business Presentations
Speechmaking for the Timid
Listening to Understand
Improving Written Reports
Letters and Memos that Get Results

Languages & Cultures

Spanish
Italian
English as a Second Language (ESL)
German
French
Japanese

Quality Management Courses

Internal Quality Assessment
Total Quality Management (TQM)
Flow Charting Work Processes
Quality Technician Certification Prep
Statistical Process Control (SPC)
Time and Motion Studies
ISO 9000 Overview
Just-in-Time Inventory Systems
Internal Quality Auditing
Production Systems

Focused Industrial Training

The Focused Industrial Training (FIT) program provides training primarily in machine operations and manufacturing processes for employees of manufacturing companies to enable them to stay abreast of changing technology.

Health & Emergency Service Occupations

Forsyth Tech offers courses to prepare individuals for entry level positions in the health and emergency services fields. The college also offers a variety of continuing education courses to enable professionals to upgrade existing skills and to fulfill professional recertification and licensing requirements. All courses are conducted according to the guidelines of the appropriate state agency and meet the requirements for employment training and recertification/licensing.
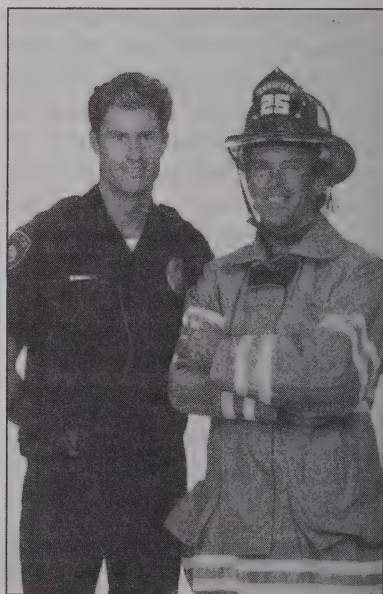
Health Occupation Courses

Health Care Activity Director Updates

Nursing Assistant I

Personal Care Aide for Adult Care Homes

Preventing AIDS

Nursing Care Management: Long Term Care

Vital Signs

Rehabilitation Nursing for the Older Client

Medical Terminology

Alzheimer and Related Dementia

Nursing Assistant II

Management Skills: Health Care Professional

IV Therapy for the RN or LPN

Medical Coding ICP-9-CM

Physical Assessment for Nurses

Licensed Practical Nurse Refresher

Legal Aspects of Nursing

Nursing Asst. Refresher (Competency Test)

Registered Nurse Refresher

Emergency Medical Technician - Basic
Defibrillation
Intermediate
Paramedic

Amer. Heart Assoc. Health Care Provider CPR

Industrial Technology

Industrial technology constantly changes, so Forsyth Tech's industrial technology courses are continually updated to enable employees to learn the use of new equipment and processes. Most industrial technology courses are customized and conducted for the employees of specific companies because of the variance in equipment and processes used among companies. Some courses, however, are conducted according to certification, federal, or state guidelines to train company employees in specialized techniques, OSHA, and/or systems operations. Others are developed to meet the cross-sectional needs of particular industries; for example, metalworking or electrical maintenance.

Industrial Technology Couses

Forklift Safety

Heating and Air Conditioning

Geometric Dimensioning & Tolerancing

Industrial Electronics

Industrial Electrical Maintenance

Basic Electricity

Basic Electronics

Tool & Die Making

Machine Tooling

Machine Operations

Machinist Fundamentals

Lineman Training

Industrial Control Processing

Construction Trades

Hazardous Waste Management

Machinist Math

General Contractor License

Welding

Hazardous Waste Management

Hydraulics

Applied Trigonometry

Industrial Chemistry

Precision Measuring Instruments

Air Pollution Control

EPA Refrigerate Certification

CNC Operation

OSHA Certification: 1910 Standards

Diesel Mechanics

Electrical Contractor License

Auto Safety Inspection and Emissions

Waste/Wastewater Operations

New and Expanding Industry

New and Expanding Industry employee training is conducted free of charge for existing or new industries that plan to add a minimum of twelve new employees in a year. Training is for new employees only.

Preemployment Training

Forsyth Tech conducts preemployment training programs for client companies to train a pool of qualified applicants for specific job vacancies. Companies can take applications and conduct interviews near the completion of the preemployment program.

Small Business Center

The Small Business Center (SBC) provides counseling, information resources, and educational programs to assist current and prospective business owners with beginning or sustaining a business. The SBC is located at Forsyth Tech's Fifth Street Center which is located in Forsyth County's Fifth Street Library in downtown Winston-Salem. An appointment with the SBC director can be made by calling 631-1325.

Emergency Services

Emergency Medical Services: Forsyth Tech offers certification courses in all levels of Emergency Medical Services, ranging from the Emergency Medical Technician to the Paramedic. For individuals with an EMS certification, the college offers continuing education and refresher courses and has the capability of conducting specialty courses for rescue squads.

Fire Service: In addition to offering fire and safety-related courses for business and industry, Forsyth Tech also conducts basic through advanced firefighter and rescue training for fire departments in Forsyth and Stokes counties. A wide range of fire service continuing education and specialty courses is also available.

Law Enforcement Training: To prepare individuals for careers in law enforcement, Forsyth Tech offers certification courses ranging from detention officer training to basic law enforcement training. The college also conducts law enforcement specialty and continuing education courses for private and educational security agencies as well as for city, county, state, and federal law enforcement agencies

Personal Development
Adult Basic Skills

The Adult Basic Skills program provides education in basic reading, writing, and math skills.

The primary objectives of the program are:

1. To enable individuals to achieve greater independence in their personal lives,
2. To enhance their ability to benefit from occupational training,
3. To increase their opportunities for better and more rewarding jobs,
4. To make them better able to meet their family and community responsibilities, and
5. To help business and industry use the full capabilities of their workforce.

Adult Basic Education classes are held at various locations throughout Forsyth and Stokes counties. Classes are conducted during the day and evening hours. No registration fees are charged to the student. Some books and materials may be supplied free of charge.

Adult High School Diploma

Forsyth Tech, in cooperation with the Winston-Salem/Forsyth County School System and the Stokes County School System, offers day and evening courses for high school credit to adult students who wish to obtain an adult high school diploma.

Adults take courses needed to satisfy

NC high school graduation requirements. Students may carry as many as four courses per quarter. A passing score on the high school competency test is required for graduation. The program is designed for adults 18 years old or older. Enrollment by 16- and 17-year olds may be allowed if they have been out of school for at least 6 months and were not suspended or expelled from school as the result of a disciplinary action.

There is no registration fee; however, students must furnish their own books and supplies.
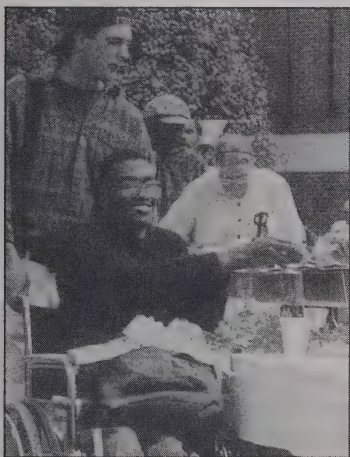
Compensatory Education

The Compensatory Education program provides educational opportunities that enable persons with mental handicaps resulting from developmental or environmental causes to function in society at a level which will allow them to reach their full potential and maintain mastered skills. Areas within the program of study are:

1. Language
2. Math
3. Social Science
4. Community Living
5. Health
6. Consumer Education
7. Vocational Education

Compensatory Education classes are held at various locations in Forsyth and Stokes counties as well as on the West Campus. No fees are charged to the student, and books and materials are supplied free of charge.

Community Service Programs

The Community Service programs are designed to provide courses, seminars, and activities that (1) contribute to the community's overall cultural, civic and intellectual growth; and (2) assist adults in the development of new skills or the upgrading of existing ones in their avocational, academic, and practical skills areas of interest.

The Community Service programs include:

1. **Academic Extension Courses** - designed to serve the academic needs of adult citizens, including courses in humanities, mathematics and science, and social sciences. Some classes that fall in this category: foreign languages, sign language, creative writing.

2. **Practical Skills Courses** - designed to provide practical training for persons pursuing additional skills which are not considered their major or primary vocation, but may supplement income or may lead to employment. Some classes that fall in this category: cooking, quiltmaking, sewing, woodcarving, picture framing and matting.

3. **Avocational Courses** - designed to focus on an individual's personal or leisure needs rather than their occupation, profession, or employment. Some classes that fall in this category: drawing, painting, crafts, photography, piano, stained glass, pottery.

English as a Second Language (ESL)

The ESL program provides instruction for foreign-born adults who have limited English proficiency. Students may attend four levels of classes to acquire skills in listening, speaking, reading, writing, and comprehension of the English language, and acculturation to the society of the United States. No registration fee.

General Education Development (GED)

The Tests of General Educational Development, developed by the American Council of Education for persons who have not graduated from high school, are designed to measure, as nearly as possible, the skills and concepts generally associated with four years of regular high school instruction.

Using a multiple-choice question format for each of the five tests (Writing Skills, Social Studies, Science, Interpreting Literature and the Arts, and Mathematics), as well as an essay for Writing Skills, the test battery corresponds to the general framework of most high school curriculums. The context of items attempts to measure skills relevant to adult experience, rather than the ability to remember facts, details, or precise definition. All fifty states, the District of Columbia, U.S. territories, ten Canadian provinces and territories, and several foreign countries use results from the GED tests as a basis for issuing high school credentials. These diplomas are official documents that are nearly always accepted as valid credentials by employers and directors of training programs. In addition, all community colleges and some four-year colleges and universities have admissions policies that permit GED test score reports to be accepted in lieu of complete high school transcripts.

Upon successful completion of the GED tests, a high school diploma equivalency is issued by the North Carolina Community College System. Forsyth Tech is one of the 83 official GED testing centers in the state and is the only one in Forsyth County.

Forsyth Tech offers GED Preparation classes at selected sites throughout Forsyth and Stokes counties. The GED tests are given by appointment only at Forsyth Tech's West Campus to adults 18 years old or older. There is a $7.50 fee for taking the GED test.

Human Resources Development (HRD)

The mission of Forsyth Tech's Human Resources Development Program is to strengthen the employment and educational opportunities of the county's residents who are unemployed or underemployed. The primary goal is to help these individuals develop the essential skills needed for securing and maintaining employment. All courses in the Human Resources Development program are offered free of charge. It is our goal to tailor the dates, times, and locations of our classes to meet the needs of the students who enroll.
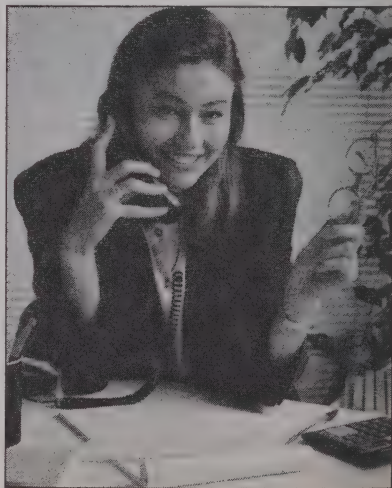
Associate in Applied Science Degree Curriculums
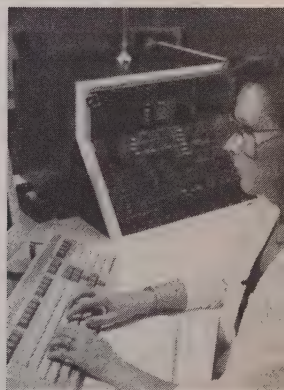
ASSOCIATE IN APPLIED SCIENCE DEGREE CURRICULUMS

CURRICULUM DESCRIPTION

The curriculums described on the following pages are technical in nature. Upon completion of a curriculum, the graduate will be awarded the associate in applied science degree. This degree is recognized nationally to indicate the successful completion of two years of education beyond the high school level.

The listing of courses for each curriculum is shown in the proper sequence; consequently, applicants should plan to attend 21 or 24 consecutive months.

The College's purpose is to offer the technical courses which will prepare the graduate for immediate employment opportunities. Therefore, the ability to transfer to other institutions of higher education, and to transfer credit earned, will be determined by the receiving institution.

SAMPLE COURSE LISTING

		Cl	Lb	Cn	Cr
RTT 239	RTT Clinical Ed V	0	2	18	7
		0	**2**	**18**	**7**

KEY TO SAMPLE COURSE LISTING

RTT .... .Course Prefix

239 .... .Course Number

RTT Clinical Ed V .... .Course Title

Cl
0 . . .Number of Classroom Hours Per Week

Lb
2 . . .Number of Laboratory Hours Per Week

Cn
18 . . . . .Number of Clinical Hours Per Week

Cr
7 . . . . . . .Number of Semester Hours Credit

3 2 0 4 . . . . .Total Number of Contact Hours Per Week

ACCOUNTING A 25 10 0

CURRICULUM DESCRIPTION

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
ACC 120	Principles of Accounting I	3	2	4
ENG 111	Expository Writing	3	0	3
MAT 115	Mathematical Models	2	2	3
OST 131	Keyboarding	1	2	2
PSY 150	General Psychology	3	0	3
		12	6	15
SPRING - 1st Year				
ACC 121	Principles of Accounting II	3	2	4
ACC 129	Individual Income Taxes	2	2	3
CIS 111	Basic PC Literacy	1	2	2
ENG 114	Pro. Research and Reporting	3	0	3
---- ----	Humanities/Fine Arts Selection	3	0	3
		12	6	15
SUMMER - 1st Year				
ACC 130	Business Income Taxes	2	2	3
ACC 220	Intermediate Accounting I	3	2	4
BUS 115	Business Law I	3	0	3
		8	4	10
FALL - 2nd Year				
ACC 221	Intermediate Accounting II	3	2	4
ACC 225	Cost Accounting	3	0	3
ACC 269	Auditing	3	0	3
BUS 116	Business Law II	3	0	3
CIS 120	Spreadsheet I	2	2	3
		14	4	16
SPRING - 2nd Year				
ACC 150	Computerized General Ledger	1	2	2
ACC 226	Managerial Accounting	3	0	3
ACC 250	Advanced Accounting	3	0	3
ACC 279	Advanced Auditing	3	0	3
ECO 252	Principles of Macroeconomics	3	0	3
		13	2	14

TOTAL CREDIT HOURS: 70

ACCOUNTING A 25 10 0
Evening Curriculum

CURRICULUM DESCRIPTION

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
ACC 120	Principles of Accounting I	3	2	4
ENG 111	Expository Writing	3	0	3
		6	2	7
SPRING - 1st Year				
ACC 121	Principles of Accounting II	3	2	4
OST 131	Keyboarding	1	2	2
		4	4	6
SUMMER - 1st Year				
ACC 220	Intermediate Accounting I	3	2	4
		3	3	4
FALL - 2nd Year				
ACC 221	Intermediate Accounting II	3	2	4
ENG 114	Pro. Research and Reporting	3	0	3
		6	2	7

		Cl	Lb	Cr
SPRING - 2nd Year				
ACC 129	Individual Income Taxes	2	2	3
MAT 115	Mathematical Models	2	2	3
		4	4	6
SUMMER - 2nd Year				
ACC 130	Business Income Taxes	2	2	3
		2	2	3
FALL - 3rd Year				
ACC 225	Cost Accounting	3	0	3
CIS 111	Basic PC Literacy	1	2	2
		4	2	5
SPRING - 3rd Year				
ACC 226	Managerial Accounting	3	0	3
BUS 115	Business Law I	3	0	3
		6	0	6
SUMMER - 3rd Year				
BUS 116	Business Law II	3	0	3
PSY 150	General Psychology	3	0	3
		6	0	6
FALL - 4th Year				
ACC 150	Computerized General Ledger	1	2	2
ACC 269	Auditing	3	0	3
		4	2	5
SPRING - 4th Year				
ACC 250	Advanced Accounting	3	0	3
ACC 279	Advanced Auditing	3	0	3
		6	0	6
SUMMER - 4th Year				
ECO 252	Principles of Macroeconomics	3	0	3
		3	0	3
FALL - 5th Year				
CIS 120	Spreadsheet I	2	2	3
		2	2	3

TOTAL CREDIT HOURS: 70

ARCHAEOLOGICAL AND HISTORICAL PRESERVATION TECHNOLOGY

This curriculum will be offered to students at Forsyth Technical Community College through an agreement with Randolph Community College.

CURRICULUM DESCRIPTION

The Archaeological and Historical Preservation Technology curriculum provides courses related to the documentation and preservation of cultural and historic resources, emphasizing technical training in archaeological methods and building preservation/restoration.

The program will qualify students to assist archaeologists or historic preservationists and provide the skill necessary to restore or conserve historically significant sites. Specific tasks include data collection through surveys, documentation, application of preservation law, and restoration/conservation activities.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cn	Cr
FALL - 1st Year					
ENG 111*	Expository Writing	3	0	0	3
ENG 111A*	Expository Writing Lab	0	2	0	1
MAT 120*	Geometry and Trigonometry	2	2	0	3
ANT 210	General Anthropology	3	0	0	3
HPT 111	Prin. of Historic Preservation	3	0	0	3
HPT 112	Intro to Photographic Documentation	2	2	0	3
		13	**6**	**0**	**16**
SPRING - 1st Year					
ENG 114*	Professional Research and Reporting	3	0	0	3
BUS 137*	Principles of Management	3	0	0	3
CIS 113*	Computer Basics	0	2	0	1
DFT 115	Architectural Drafting	1	2	0	2
HPT 115	Introduction to Archaeology	3	0	0	3
ARC 250	Survey of Architecture	3	0	0	3
		13	**4**	**0**	**15**
SUMMER - 1st Year					
HPT 121	Principles of Archaeological Excavation	2	18	0	8
	OR				
HPT 131	Fundamentals of Carpentry and Construction	2	18	0	8
		2	**18**	**0**	**8**

		Cl	Lb	Cn	Cr
FALL - 2nd Year					
HPT 110	Historical and Cultural Landscapes	2	3	0	3
HPT 233	Historic Construction Methods	2	6	0	4
HPT 235	Building Codes and Regulations	3	0	0	3
---- ----	HPT Elective	6	0	0	6
		13	**9**	**0**	**16**
SPRING - 2nd Year					
HPT 237	HAZMAT and OSHA Regulations	3	0	0	3
HPT 239	Specialized Construction Trades	1	15	0	6
---- ----*	Free Elective	3	0	0	3
		7	**15**	**0**	**12**
SUMMER - 2nd Year					
COE 113	Coop Work Experience I	0	0	30	3
		0	**0**	**30**	**3**

*These courses will be taught on the Forsyth Tech campus. All other courses will be taught on the Randolph Community College campus.

TOTAL CREDIT HOURS: 70

ARCHAEOLOGICAL AND HISTORICAL PRESERVATION TECHNOLOGY Archaeological Technician Concentration

This curriculum will be offered to students at Forsyth Technical Community College through an agreement with Randolph Community College.

CURRICULUM DESCRIPTION

Archaeological Technician is a concentration under the curriculum title of Archaeological and Historical Preservation Technology. This curriculum provides in-depth study of professional archaeology. The major skill areas of this concentration - field methods, laboratory techniques, and preservation law - are developed through extensive laboratory assignments and on-the-job internships.

Course work includes detailed studies of field methods in archaeological excavation and survey, laboratory procedures for artifact analysis and conservation, North American prehistory and historic material culture, theoretical principles of modern archaeology, and preservation law.

Graduates should be thoroughly prepared to successfully perform the duties required of entry levels field and support positions in professional archaeology.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week			
	Cl	Lb	Cn	Cr
FALL - 1st Year				
ENG 111*Expository Writing	3	0	0	3
ENG 111A*Expository Writing Lab	0	2	0	1
MAT 120* Geometry and Trigonometry	2	2	0	3
ANT 210 General Anthropology	3	0	0	3
HPT 111 Prin. of Historic Preservation	3	0	0	3
HPT 112 Intro to Photographic Documentation	2	2	0	3
	13	6	0	16
SPRING - 1st Year				
ENG 114* Professional Research and Reporting	3	0	0	3
BUS 137* Principles of Management	3	0	0	3
CIS 113*Computer Basics	0	2	0	1
DFT 115 Architectural Drafting	1	2	0	2
HPT 115 Introduction to Archaeology	3	0	0	3
ARC 250 Survey of Architecture	3	0	0	3
	13	4	0	15

	Cl	Lb	Cn	Cr
SUMMER - 1st Year				
HPT 121 Principles of Archaeological Excavation	2	18	0	8
	2	18	0	8
FALL - 2nd Year				
HPT 220 Artifact Conservation Methods	2	6	0	4
HPT 110 Historical and Cultural Landscapes	2	3	0	3
---- ---- HPT Elective	6	0	0	6
---- ----* Free Elective	3	0	0	3
	13	9	0	16
SPRING - 2nd Year				
HPT 222 Introduction to Artifact Analysis	2	6	0	4
HPT 224 Archaeological Field Survey Methods	2	6	0	4
HPT 226 Introduction to Historic Archaeology	3	0	0	3
---- ---- HPT Elective	3	0	0	3
	10	12	0	14
SUMMER - 2nd Year				
COE 113 Coop Work Experience I	0	0	30	3
	0	0	30	3

*These courses will be taught on the Forsyth Tech campus. All other courses will be taught on the Randolph Community College campus.

TOTAL CREDIT HOURS: 72

ARCHITECTURAL TECHNOLOGY A 40 10 0

CURRICULUM DESCRIPTION

The Architectural Technology curriculum provides individuals with knowledge and skills that will lead to employment and advancement in the field of architectural technology. Technical courses are included which will enable the graduate to advance into related areas of work as job experience is obtained or to continue toward an advanced degree in an associated field of technology.

Architectural technicians translate the architect's design sketches into complete and accurate plans and drawings for construction purposes. The technician will be involved in work requiring a knowledge of drafting, construction materials, mechanical and structural systems, estimating, building codes, and specifications.

Initial employment opportunities exist with architectural and engineering firms, private utilities, contractors, and municipal governments.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
ARC 111	Intro to Arch. Tech.	1	6	3
ARC 112	Const. Mats & Methods	3	2	4
ARC 250	Survey of Architecture	3	0	3
ENG 111	Expository Writing	3	0	3
MAT 161	College Algebra	3	0	3
		13	8	16
SPRING - 1st Year				
ARC 113	Residential Arch. Tech	1	6	3
ARC 114	Architectural CAD	1	3	2
ENG 114	Tech. Communications	3	0	3
MAT 162	College Trigonometry	3	0	3
PHY 151	College Physics I	3	2	4
		11	11	15
SUMMER - 1st Year				
ARC 131	Building Codes	2	2	3
ARC 211	Light Const. Tech.	1	6	3
ARC 221	Arch. 3-D CAD	1	4	3
ARC 230	Environmental Sys.	3	3	4
		7	15	13
FALL - 2nd Year				
ARC 141	Elem. Structures for Arc	4	0	4
ARC 212	Commercial Cont. Tech	1	6	3
ARC 231	Arch. Presentation	2	4	4
---- ----	Humanity (Elective)	3	0	3
---- ----	Social Science (Elect.)	3	0	3
		13	10	17
SPRING - 2nd Year				
ARC 213	Design Project	2	6	4
ARC 235	Arch. Portfolio	2	3	3
ARC 240	Site Planning	2	2	3
ARC 264	Digital Architecture	1	3	2
		7	14	12

TOTAL CREDIT HOURS: 73

ASSOCIATE DEGREE NURSING A 45 10 0

CURRICULUM DESCRIPTION

The Associate Degree Nursing curriculum is designed to prepare graduates to assess, analyze, plan, implement and evaluate nursing care. The graduate is eligible to apply to take the National Council Licensure Examination (NCLEX-RN), which is required for practice as a registered nurse.

Individuals desiring a career in registered nursing should take biology, algebra and chemistry courses prior to entering the program.

The registered nurse may be employed in a wide variety of health care settings such as hospitals, long-term care facilities, clinics, physician's offices, industry and community health agencies.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week			
	Cl	Lb	Cn	Cr
FALL - 1st Year				
ACA 111 College Student Success	1	0	0	1
BIO 163 Basic Anatomy and Physiology	4	2	0	5
NUR 110 Nursing I	5	3	6	8
PSY 150 General Psychology	3	0	0	3
	13	**5**	**6**	**17**
SPRING - 1st Year				
BIO 271 Pathophysiology	3	0	0	3
ENG 111 Expository Writing	3	0	0	3
NUR 120 Nursing II	5	3	6	8
PSY 241 Developmental Psych	3	0	0	3
	14	**3**	**6**	**17**
SUMMER - 1st Year				
CIS 111 Basic PC Literacy	1	2	0	2
ENG 115 Oral Communication	3	0	0	3
NUR 130 Nursing III	4	3	6	7
	8	**5**	**6**	**12**
FALL - 2nd Year				
NUR 210 Nursing IV	5	3	12	10
---- ---- Humanities Requirement *	3	0	0	3
	8	**3**	**12**	**13**
SPRING - 2nd Year				
NUR 220 Nursing V	4	3	15	10
NUR 244 Issues & Trends	2	0	0	2
	6	**3**	**15**	**12**

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I

Forsyth Tech ADN applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program. Chemistry MUST be taken within the past 5 years.

TOTAL CREDIT HOURS: 71

AUTOMATION/ROBOTICS TECHNOLOGY A 40 12 0

CURRICULUM DESCRIPTION

The Automation/Robotics curriculum is designed to prepare technicians to install, program, operate, maintain, service and repair automated manufacturing systems, including robots.

The course of study will include fundamentals of mechanical, electrical, and electronic technology with specific application of robots, controlling devices, and electromechanical equipment in automated manufacturing systems.

The graduate of this curriculum will be prepared for employment in industries that utilize robots and other electromechanical devices in automated manufacturing.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
EGR 131	Intro to Elect. Tech.	1	2	2
ELC 131	AC/DC Electricity	4	3	5
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab	0	2	1
MAT 121	Algebra/Trigonometry I	2	2	3
		11	11	16
SPRING - 1st Year				
ELN 131	Elec. Devices/Circuits	3	3	4
ENG 114	Prof. Res. and Report	3	0	3
MAT 122	Algebra/Trigonometry II	2	2	3
PHY 131	Physics - Mechanics	3	2	4
PSY 150	Psychology	3	0	3
		14	7	17
SUMMER - 1st Year				
ATR 112	Intro to Automation	2	3	3
ELN 132	Linear Integrated Circuits	3	3	4
ELN 231	Industrial Controls	2	3	3
		7	9	10
FALL - 2nd Year				
ATR 211	Robot Programming	2	3	3
ATR 213	Intro to PLC's	3	3	4
ATR 215	Sensors and Transducers	2	3	3
ELN 133	Digital	3	2	4
HYD 110	Hydraulics	2	3	3
		12	14	17
SPRING - 2nd Year				
ATR 214	Advanced PLC's	3	3	4
ATR 218	CIM	2	3	3
ATR 219	Aut. System Troublest.	1	3	2
EGR 285	Inter. Project	1	3	2
---- ----	Humanities Elective	3	0	3
		10	12	14

TOTAL CREDIT HOURS: 74

AUTOMOTIVE SYSTEMS TECHNOLOGY A 60 16 A
Race Car Performance Concentration

This curriculum was under development and pending state approval at the time of printing. For additional information about Race Car Performance Concentration, call (910) 723-0371, Ext. 7253.

CURRICULUM DESCRIPTION

Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
AUT 141	Suspension and Steering	2	4	4
AUT 151	Brakes	2	2	3
AUT 161	Electrical Systems	2	6	4
MAT 115	Mathematical Models	2	2	3
WLD 110	Cutting Processes	1	3	2
		9	17	16
SPRING - 1st Year				
AUT 115	Engine Fundamentals	2	3	3
AUT 116	Engine Repair	1	3	2
AUT 164	Auto Electronics	2	2	3
AUT 181	Engine Performance - Electrical	2	3	3
AUT 183	Engine Performance - Fuel	2	3	3
		9	14	14
SUMMER - 1st Year				
AUB 134	Autobody MIG Welding	1	4	3
AUT 171	Heating and Air Conditioning	2	3	3
ENG 111	Expository Writing	3	0	3
PSY 150	General Psychology (or Social/Behavioral Science Elective)	3	0	3
		9	7	12
FALL - 2nd Year				
AUT 251	Intro to Racing	3	0	3
AUT 252	Racing Engine Prep	3	9	6
AUT 253	Race Engine Accessories	2	4	4
HUM 110	Technology and Society	3	0	3
		11	13	16
SPRING - 2nd Year				
AUT 254	Chassis Fabrication	3	9	6
AUT 255	Sheet Metal Fabrication	1	6	3
AUT 256	Setting Up the Race Car	4	4	6
ENG 115	Oral Communications	3	0	3
		11	19	18

TOTAL CREDIT HOURS: 76

BUSINESS ADMINISTRATION A 25 12 0

CURRICULUM DESCRIPTION

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
BUS 110	Intro to Business	3	0	3
BUS 115	Business Law I	3	0	3
ENG 111	Expository Writing	3	0	3
MAT 115	Mathematical Models	2	2	3
OST 131	Keyboarding	1	2	2
		12	4	14
SPRING - 1st Year				
BUS 116	Business Law II	3	0	3
BUS 121	Business Math	2	2	3
BUS 137	Principles of Management	3	0	3
CIS 111	Basic PC Literacy	1	2	2
ENG 114	Professional Research and Reporting	3	0	3
		12	4	14
SUMMER - 1st Year				
CIS 112	Windows	1	2	2
ECO 252	Principles of Macroeconomics	3	0	3
ENG 115	Oral Communication	3	0	3
		7	2	8
FALL - 2nd Year				
ACC 120	Accounting Principles I	3	2	4
CIS 120	Spreadsheet I	2	2	3
MKT 120	Principals of Marketing	3	0	3
PSY 150	Psychology	3	0	3
---- ----	Humanities/Fine Arts Course	3	0	3
		14	4	16
SPRING - 2nd Year				
ACC 121	Accounting Principles II	3	2	4
ACC 129	Individual Income Tax	2	2	3
ACC 150	Computerized General Ledger	1	2	2
BUS 125	Personal Finance	3	0	3
BUS 270	Professional Development	3	0	3
		12	6	15

TOTAL CREDIT HOURS: 67

BUSINESS ADMINISTRATION A 25 12 A
Banking and Finance Concentration

CURRICULUM DESCRIPTION

Banking and Finance is a concentration under the curriculum title of Business Administration. This curriculum is designed to prepare individuals for a career with various financial institutions and other businesses.

Course work includes principles of banking, money and banking, lending fundamentals, banking and business law, and practices in the areas of marketing, management, accounting, and economics.

Graduates should qualify for a variety of entry-level jobs in banking and finance. Also available are employment opportunities with insurance, brokerage and mortgage companies, and governmental lending agencies.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
AIB 110	Principles of Banking	3	0	3
ENG 111	Expository Writing	3	0	3
MAT 115	Mathematical Models	2	2	3
OST 131	Keyboarding	1	2	2
PSY 150	Psychology	3	0	3
		12	4	14
SPRING - 1st Year				
ACC 129	Individual Income Tax	2	2	3
AIB 131	Fundamentals of Bank Lending	3	0	3
AIB 222	Money and Banking	3	0	3
CIS 111	Basic PC Literacy	1	2	2
ENG 114	Professional Research and Reporting	3	0	3
		12	4	14
SUMMER - 1st Year				
CIS 112	Windows	1	2	2
ECO 252	Principles of Macroeconomics	3	0	3
ENG 115	Oral Communications	3	0	3
		7	2	8
FALL - 2nd Year				
ACC 120	Principles of Accounting I	3	2	4
AIB 141	Law and Banking	3	0	3
AIB 152	Trust Business	3	0	3
BUS 115	Business Law I	3	0	3
BUS 137	Principles of Management	3	0	3
		15	2	16
SPRING - 2nd Year				
ACC 121	Principles of Accounting II	3	2	4
AIB 245	Bank Investments	3	0	3
AIB 254	Securities Processing	3	0	3
MKT 120	Principles of Marketing	3	0	3
---- ----	Humanities/ Fine Arts Elective*	3	0	3
		15	2	16

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I

TOTAL CREDIT HOURS: 68

BUSINESS ADMINISTRATION A 25 12 A
Banking and Finance Concentration - Evening Curriculum

CURRICULUM DESCRIPTION

Banking and Finance is a concentration under the curriculum title of Business Administration. This curriculum is designed to prepare individuals for a career with various financial institutions and other businesses.

Course work includes principles of banking, money and banking, lending fundamentals, banking and business law, and practices in the areas of marketing, management, accounting, and economics.

Graduates should qualify for a variety of entry-level jobs in banking and finance. Also available are employment opportunities with insurance, brokerage and mortgage companies, and governmental lending agencies.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cr
Hours Per Week				

FALL - 1st Year

AIB	110	Principles of Banking	3	0	3
ENG	111	Expository Writing	3	0	3
OST	131	Keyboarding	1	2	2
			7	**2**	**8**

SPRING - 1st Year

AIB	131	Fundamentals of Bank Lending	3	0	3
ENG	114	Professional Research and Reporting	3	0	3
MAT	115	Mathematical Models	2	2	3
			8	**2**	**9**

SUMMER - 1st Year

ACC	129	Individual Income Tax	2	2	3
AIB	222	Fundamentals of Bank Lending	3	0	3
PSY	150	Psychology	3	0	3
			8	**2**	**9**

FALL - 2nd Year

CIS	111	Basic PC Literacy	1	2	2
ECO	252	Principles of Macroeconomics	3	0	3
ENG	115	Oral Communications	3	0	3
			7	**2**	**8**

SPRING - 2nd Year

AIB	141	Law and Banking	3	0	3
BUS	137	Principles of Management	3	0	3
CIS	112	Windows	1	2	2
			7	**2**	**8**

SUMMER - 2nd Year

AIB	152	Trust Business	3	0	3
BUS	115	Business Law I	3	0	3
----	----	Humanities/Fine Arts Elective*	3	0	3
			9	**0**	**9**

FALL - 3rd Year

ACC	120	Principles of Accounting I	3	2	4
AIB	245	Bank Investments	3	0	3
MKT	120	Principles of Marketing	3	0	3
			9	**2**	**10**

SPRING - 3rd Year

ACC	121	Principles of Accounting II	3	2	4
AIB	254	Securities Processing	3	0	3
			6	**2**	**7**

*HUMANITIES REQUIREMENT
Choose one of the following:

ART	111	Art Appreciation
MUS	110	Music Appreciation
PHI	215	Philosophical Issues
PHI	240	Intro to Ethics
SPA	111	Elementary Spanish I

TOTAL CREDIT HOURS: 68

BUSINESS ADMINISTRATION A 25 12 F
Marketing and Retailing Concentration

CURRICULUM DESCRIPTION

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing.

Course work includes: marketing, retailing, merchandising, selling, advertising, computer technology, and management.

Graduates should qualify for marketing positions within manufacturing, retailing, and service organizations.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	Cl	Lb	Cr
FALL - 1st Year			
BUS 115 Business Law I	3	0	3
ENG 111 Expository Writing	3	0	3
MAT 115 Mathematical Models	2	2	3
MKT 120 Prin. of Marketing	3	0	3
OST 131 Keyboarding	1	2	2
	12	4	14
SPRING - 1st Year			
BUS 116 Business Law II	3	0	3
BUS 121 Business Math	2	2	3
BUS 137 Prin. of Management	3	0	3
CIS 111 Basic PC Literacy	1	2	2
ENG 114 Professional Research			
and Reporting	3	0	3
	12	4	14
SUMMER - 1st Year			
ACC 120 Prin. of Accounting I	3	2	4
CIS 112 Windows	1	2	2
---- ---- Humanities/Fine Arts			
Course*	3	0	3
	7	4	9
FALL - 2nd Year			
CIS 165 Desktop Publishing I	2	2	3
ENG 115 Oral Communication	3	0	3
MKT 122 Visual Merchandising	3	0	3
MKT 123 Fundamentals of Selling	3	0	3
MKT 225 Marketing Research	3	0	3
	14	2	15
SPRING - 2nd Year			
BUS 270 Professional			
Development	3	0	3
ECO 252 Principles of			
Macroeconomics	3	0	3
MKT 220 Advertising and Sales			
Promotion	3	0	3
MKT 226 Retail Applications	3	0	3
PSY 150 General Psychology	3	0	3
	15	0	15

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I (4 SHC)

TOTAL CREDIT HOURS: 67

BUSINESS ADMINISTRATION A 25 12 F
Marketing and Retailing Concentration - Evening Curriculum

CURRICULUM DESCRIPTION

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing.

Course work includes: marketing, retailing, merchandising, selling, advertising, computer technology, and management.

Graduates should qualify for marketing positions within manufacturing, retailing, and service organizations.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
ENG 111	Expository Writing	3	0	3
MKT 120	Prin. of Marketing	3	0	3
OST 131	Keyboarding	1	2	2
		7	2	8
SPRING - 1st Year				
BUS 270	Professional Development	3	0	3
CIS 111	Basic PC Literacy	1	2	2
ENG 114	Professional Research and Reporting	3	0	3
		7	2	8
SUMMER - 1st Year				
ACC 120	Prin. of Accounting I	3	2	4
CIS 112	Windows	1	2	2
---- ----	Humanities/Fine Arts Course**	3	0	3
		7	4	9
FALL - 2nd Year				
BUS 115	Business Law I	3	0	3
MKT 122*	Visual Merchandising	3	0	3
ENG 115	Oral Communication	3	0	3
		9	0	9
SPRING - 2nd Year				
BUS 116	Business Law II	3	0	3
MAT 115	Mathematical Models	2	2	3
MKT 220*	Advertising and Sales Promotion	3	0	3
		8	2	9
SUMMER - 2nd Year				
BUS 121	Business Math	2	2	3
PSY 150	General Psychology	3	0	3
		5	2	6

		Cl	Lb	Cr
FALL - 3rd Year				
CIS 165	Desktop Publishing I	2	2	3
MKT123*	Fundamentals of Selling	3	0	3
MKT225*	Marketing Research	3	0	3
		8	2	9
SPRING - 3rd Year				
BUS 137	Prin. of Management	3	0	3
ECO 252	Principles of Macroeconomics	3	0	3
MKT226*	Retail Applications	3	0	3
		9	0	9

**HUMANITIES REQUIREMENT
Choose one of the following:

ART	111	Art Appreciation
MUS	110	Music Appreciation
PHI	215	Philosophical Issues
PHI	240	Intro to Ethics
SPA	111	Elementary Spanish I

* These Marketing and Retailing Concentration courses may be offered once every two years in the evening rather than once a year, depending upon demand. Therefore, students should register for these classes whenever they are offered.

TOTAL CREDIT HOURS: 67

CURRICULUM DESCRIPTION

The Computer Engineering Technology curriculum provides the skills required to install, service, and maintain computers, peripherals, networks, and microprocessor and computer controlled equipment. It includes training in both hardware and software, emphasizing operating systems concepts to provide a unified view of computer systems.

Course work includes mathematics, physics, electronics, digital circuits and programming, with emphasis on the operation, use, and interfacing of memory and devices to the CPU. Additional topics may include communications, networks, operating systems, programming languages, Internet configuration and design, and industrial applications.

Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring a knowledge of electronic and computer systems. Graduates may also qualify for certification in electronics, computers, or networks.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
EGR 131	Intro to Elect. Tech.	1	2	2
ELC 131	DC/AC Circuit Analysis	4	3	5
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab 1		0	2
MAT 121	Algebra/Trigonometry I	2	2	3
		11	**11**	**16**
SPRING - 1st Year				
CET 111	Computer Upgrade/ Repair I	2	3	3
CIS 130	Survey of Operating Systems	2	3	3
ELN 131	Elect. Devices/Circuits	3	3	4
ENG 114	Prof. Research and Reporting	3	0	3
MAT 122	Algebra/Trigonometry II	2	2	3
		12	**11**	**16**
SUMMER - 1st Year				
CET 222	Comp. Architecture	2	0	2
ELN 132	Linear IC Applications	3	3	4
ELN 133	Digital Electronics	3	3	4
		8	**6**	**10**
FALL - 2nd Year				
CET 211	Comp. Upgrade/ Repair II	2	3	3
CSC 134	C++ Programming	2	3	3
ENG 131	Intro. to Literature	3	0	3
ELN 232	Intro. to Microprocessors	3	3	4
ELN 237	Local Area Networks	2	3	3
		12	**12**	**16**
SPRING - 2nd Year				
CET 212	Integrated Mfg. Systems	1	3	2
ELN 233	Microprocessor Systems	3	3	4
ELN 238	Advanced LANs	2	3	3
PHY 131	Physics - Mechanics	3	2	4
PSY 150	General Psychology	3	0	3
		12	**11**	**16**

TOTAL CREDIT HOURS: 74

CRIMINAL JUSTICE TECHNOLOGY A 55 18 0

CURRICULUM DESCRIPTION

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security service. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

CURRICULUM COURSES
Course Title   Semester Hours Credit

CORE COURSES
CJC 111	Introduction to Criminal Justice	3
CJC 112	Criminology	3
CJC 113	Juvenile Justice	3
CJC 131	Criminal Law	3
CJC 212	Ethics and Community Relations	3
CJC 221	Investigative Principles	4
CJC 231	Constitutional Law	3

COE
COE 111	Co-op Work Experience	1

ENGLISH
A minimum of 6 SHC is required in English.
Required:
ENG-111	Expository Writing	3

A student may choose 3 SHC from any of the following:
ENG 112	Argument-Based Research	3
	OR	
ENG 113	Literature-Based Research	3
	OR	
ENG 114	Profess. Research and Reporting	3

It is highly recommended that Criminal Justice students take ENG-114. If you plan to transfer to a four-year college or university, check with that school's admissions office before taking your second semester of English. ENG-111A is not required for those taking ENG-111 but is strongly recommended for some students. Please see your advisor.

MATHEMATICS
A minimum of 6 SHC is required in Mathematics.
MAT 115	Mathematical Models	3
MAT 151	Statistics I	3

If you plan to transfer to a four-year college or university, check with that school's admissions office before taking Math.

Prerequisite:
High school Algebra I
OR
Developmental Ed MAT 070.

POLITICAL SCIENCE
A minimum of 3 SHC required in Political Science.
POL 120	American Government	3
	OR	
POL 130	State and Local Government	3

PSYCHOLOGY
A minimum of 6 SHC is required in Psychology.
PSY 150	General Psychology	3
	AND	
PSY 281	Abnormal Psychology	3

SOCIOLOGY
A minimum of 3 SHC is required in Sociology.
SOC 210	Introduction to Sociology	3

OTHER CRIMINAL JUSTICE COURSES
A minimum of 29 SHC must be selected from the following. All Criminal Justice students must take CJC 251 and CJC 252.
CJC 132	Court Procedures and Evidence	3
CJC 141	Corrections	3
CJC 198	Seminar in Criminal Justice	3
CJC 211	Counseling	3
CJC 214	Victimology	3
CJC 215	Organization and Administration	3
CJC 222	Criminalistics	3
CJC 232	Civil Liability	3
CJC 233	Correctional Law	3
CJC 241	Community-Based Corrections	3
CJC 251	Forensic Chemistry 1	4
CJC 252	Forensic Chemistry II	4
CJC 293	Selected Topics in Criminal Justice	3

HUMANITIES/FINE ARTS ELECTIVE
A minimum of 3 SHC must be selected from below.
ART 111	Art Appreciation	3
ENG 125	Creative Writing I	3
ENG 131	Introduction to Literature	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
ENG 241	British Literature I	3
ENG 242	British Literature II	3
ENG 262	World Literature II	3
ENG 273	African-American Literature	3
MUS 110	Music Appreciation	3
PHI 215	Philosophical Issues	3
PHI 240	Introduction to Ethics	3
SPA 111	Elementary Spanish I	3

TOTAL CREDIT HOURS: 76

EARLY CHILDHOOD ASSOCIATE A 55 22 0

CURRICULUM DESCRIPTION

The Early Childhood Associate curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school age programs.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	Cl	Lb	Cr
FALL - 1st Year			
ACA 111 College Student Success	1	0	1
EDU 144 Child Development I	3	0	3
ENG 111 Expository Writing	3	0	3
EDU 146 Child Guidance	3	0	3
EDU 119 Early Childhood Education	3	2	4
OR			
EDU 111 Early Childhood Credential I	2	0	2
AND			
EDU 112 Early Childhood Credential II	2	0	2
OR			
EDU 113 Family and Early Childhood Credential	2	0	2
SOC 210 Introduction to Sociology	3	0	3
			17
SPRING - 1st Year			
COE 111 Cooperative Education	0	10	1
COE 115 Work Exp. Seminar I	1	0	1
EDU 145 Child Development II	3	0	3
EDU 153 Health, Safety, Nutrition	3	0	3
ENG 114 Professional Research and Reporting	3	0	3
MAT 115 Mathematical Models	2	2	3
PSY 150 General Psychology	3	0	3
	15	12	17

	Cl	Lb	Cr
SUMMER - 1st Year			
EDU 131 Children, Family, and Community	3	0	3
EDU 151 Creative Activities	3	0	3
EDU 171 Instructional Media	1	2	2
EDU 185 Cognitive and Language Arts	3	0	3
---- ----- Humanities Elective	3	0	3
	13	2	14
FALL - 2nd Year			
COE 121 Co-Op Work II	0	10	1
COE 125 Work Experience Seminar II	1	0	1
EDU 221 Children with Special Needs	3	0	3
EDU 234 Infants, Toddlers and Two's	3	0	3
EDU 252 Math and Science Activities	3	0	3
EDU 282 Early Childhood Literature	3	0	3
	13	10	14
SPRING SEMESTER - 2nd Year			
COE 131 Co-Op Work Experience III	0	10	1
COE 135 Work Experience Seminar III	1	0	1
EDU 259 Curriculum Planning	3	0	3
EDU 261 Early Childhood Adm. I	2	0	2
EDU 288 Early Childhood Issues	2	0	2
SOC 215 Group Process	3	0	3
	11	0	12

TOTAL CREDIT HOURS: 74

ADDITIONAL REQUIREMENTS

Current Certification in CPR and First Aid

ELECTRONICS ENGINEERING TECHNOLOGY A 40 20 0

CURRICULUM DESCRIPTION

The Electronics Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication system, and power electronic systems.

A broad based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	Cl	Lb	Cr
FALL - 1st Year			
CIS 111 Basic PC Literacy	1	2	2
EGR 131 Intro to Elect. Tech.	1	2	2
ELC 131 DC/AC Circuit Analysis	4	3	5
ENG 111 Expository Writing	3	0	3
ENG 111A Expository Writing Lab 1		0	2
MAT 121 Algebra/Trigonometry I	2	2	3
	11	**11**	**16**
SPRING - 1st Year			
CET 111 Computer Upgrade/ Repair I	2	3	3
PHY 131 Physics - Mechanics	3	2	4
ELN 131 Elect. Devices/Circuits	3	3	4
ENG 114 Prof. Res. and Reporting	3	0	3
MAT 122 Algebra/Trigonometry II	2	2	3
	13	**10**	**17**
SUMMER - 1st Year			
ELN 132 Linear IC Applications	3	3	4
ELN 133 Digital Electronics	3	3	4
MAT 223 Applied Calculus	3	0	3
	9	**6**	**11**
FALL - 2nd Year			
ELN 229 Industrial Electronics	2	4	4
ELN 232 Intro to Microprocessors	3	3	4
ELN 237 Local Area Networks	2	3	3
ENG 131 Introduction to Literature	3	0	3
	10	**10**	**14**
SPRING - 2nd Year			
ELN 231 Industrial Controls	2	3	3
ELN 233 Microprocessor Systems	3	3	4
PHY 133 Sound and Light	3	2	4
PSY 150 General Psychology	3	0	3
	11	**8**	**14**

TOTAL CREDIT HOURS: 72

ELECTRONICS ENGINEERING TECHNOLOGY A 40 20 0
Evening Curriculum

CURRICULUM DESCRIPTION

The Electronics Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication system, and power electronic systems.

A broad based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
EGR 131	Intro to Elect. Tech.	1	2	2
ELC 131	DC/AC Circuit Analysis	4	3	5
MAT 121	Algebra/Trigonometry I	2	2	3
		8	9	12
SPRING - 1st Year				
CET 111	Computer Upgrade/			
	Repair I	2	3	3
ELN 131	Elect. Devices/Circuits	3	3	4
MAT 122	Algebra/Trigonometry II	2	2	3
PHY 131	Physics - Mechanics	3	2	4
		10	10	14
SUMMER - 1st Year				
ELN 132	Linear IC Applications	3	3	4
MAT 223	Applied Calculus	3	0	3
ELN 237	Local Area Networks	2	3	3
		8	6	10
FALL - 2nd Year				
ELN 133	Digital Electronics	3	3	4
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab 1		0	2
ELN 229	Industrial Electronics	2	4	4
		8	9	12
SPRING - 2nd Year				
ELN 232	Intro. to Microprocessors	3	3	4
ELN 231	Industrial Controls	2	3	3
ENG 114	Prof. Research and			
	Reporting	3	0	3
PSY 150	General Psychology	3	0	3
		11	6	13
SUMMER - 2nd Year				
PSY 133	Sound and Light	3	2	4
ENG 131	Introduction to Literature	3	0	3
ELN 233	Microprocessor Systems	3	3	4
		9	5	11

TOTAL CREDIT HOURS: 72

FILM AND VIDEO PRODUCTION TECHNOLOGY A 30 14 0

This is a consortium curriculum offered to students at Forsyth Technical Community College through an agreement with Piedmont Community College.

CURRICULUM DESCRIPTION

The Film and Video Production Technology curriculum prepares students for entry-level employment in production support and selected technical areas of film, video and associated media production. Instruction provides training for entry-level crew and/or production and post-production assistants in many moving image media forms.

The first year content includes exposure to the entire production process. Students are taught by industry professionals who provide extensive hands-on instruction. In the second year, students receive professional training by performing in various crew positions on actual production projects.

Graduates may find employment as entry-level crew and/or production assistants in: feature and short films, commercials, and industrial, educational, and documentary productions. Other opportunities include entry-level employment in pre-production and post-production areas for video, multimedia, and editing.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
FALL - 1st Year			
ACA 111* College Student Success	1	0	1
ENG 111* Expository Writing	3	0	3
ENG 115* Oral Communication	3	0	3
FVP 111 Intro to Film & Video	2	2	3
FVP 112 Set & Prop Construction	1	6	3
FVP 115 Camera Operations	1	5	3
MAT 140* Survey of Mathematics	3	0	3
OR			
MAT 171* Precalculus Algebra	3	0	3
	14	13	19
SPRING - 1st Year			
ENG 114* Professional Research and Reporting	3	0	3
FVP 113 Grip and Electrical	2	8	5
FVP 114 Lighting Theory and Application	2	3	3
FVP 116 Sound Operations	1	5	3
---- ----* Social and Behavioral Sciences	3	0	3
	11	16	17
SUMMER - 1st Year			
CIS 110* Introduction to Computers	2	2	3
FVP 118 A-V for Institutions	1	4	3
---- ----* Fine Arts/Humanities	3	0	3
---- ---- Free Elective	3	0	3
	9	6	12
FALL - 2nd Year			
FVP 117 Make-up and Wardrobe	1	6	4
FVP 211 Location Scouting	1	2	2
FVP 212 Production Techniques I	0	12	4
FVP 220 Editing I	2	3	3
	4	23	13
SPRING - 2nd Year			
FVP 213 Production Techniques II	0	12	4
FVP 221 Editing II	2	3	3
FVP 227 Multimedia Production	2	3	3
FVP 238 Software Apps for FVP	2	3	3
	6	21	13

*These courses will be taught on the Forsyth Tech campus. All other courses will be taught on the Piedmont Community College campus or at the NC School of the Arts.

TOTAL CREDIT HOURS: 74

HORTICULTURE TECHNOLOGY A 15 24 0

CURRICULUM DESCRIPTION

The Horticulture Technology curriculum encompasses the study and practical application of a variety of subjects in the field of horticulture. The curriculum consists of identifying and selecting plant materials; propagating, planting, and growing plants; designing basic landscapes and planting materials at the appropriate places and in the correct manner; properly maintaining plant materials; and managing the nursery, greenhouse, and garden center. In addition, skills are developed in designing and building planters, walks, patios, fences and other landscape features. The curriculum is designed to provide students with the knowledge, skills, and attitudes that are necessary for independent, creative thinking essential to success in this field.

Various types of employers hire the graduates of this curriculum. Examples are nurseries, greenhouse operations, garden centers, landscape contractors, landscape maintenance companies, and municipal governmental agencies.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
ENG 111	Expository Writing	3	0	3
HOR 160	Plant Materials I	2	2	3
HOR 162	Applied Plant Science	2	2	3
HOR 166	Soils and Fertilizers	2	2	3
HOR 255	Interiorscapes	1	2	2
		10	**8**	**14**
SPRING - 1st Year				
ENG 114	Professional Research and Reporting	3	0	3
HOR 124	Nursery Operations	2	3	3
HOR 168	Plant Propagation	2	2	3
HOR 235	Greenhouse Production and Mgmt.	2	2	3
HOR 260	Plant Materials II	2	2	3
		11	**9**	**15**
SUMMER - 1st Year				
HOR 114	Landscape Construction	2	3	3
HOR 251	Insects and Diseases	2	2	3
PSY 150	Psychology	3	0	3
		7	**5**	**9**
FALL - 2nd Year				
HOR 112	Landscape Design I	2	3	3
HOR 118	Equipment Oper. and Maint.	1	3	2
HOR 170	Horticulture Computer Apps.	1	3	2
HOR 298	Seminar in Landscape Construction	2	3	3
MAT 115	Mathematical Models	2	2	3
		8	**14**	**13**
SPRING - 2nd Year				
HOR 116	Landscape Management	2	2	3
HOR 142	Fruit and Vegetable Prod.	1	2	2
HOR 164	Horticulture Pest Management	2	2	3
HOR 213	Landscape Design II	2	2	3
---- ----	Humanities - Fine Arts Course	3	0	3
		10	**8**	**14**

TOTAL CREDIT HOURS: 65

CURRICULUM DESCRIPTION

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
CIS 115	Intro. to Prog. and Logic	2	2	3
OST 131	Keyboarding	1	2	2
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab 1		0	2
MAT 115	Mathematical Models	2	2	3
	OR			
MAT 161	College Algebra	(3)	(0)	(3)
	AND			
MAT 161A	College Algebra Lab	(0)	(2)	(1)
		9	**10**	**14**
		(10)	**(10)**	**(15)**
SPRING - 1st Year				
CIS 116	Intro. PC App. Development	2	3	3
CIS 130	Survey of Operating Systems	2	3	3
CSC 139	Visual BASIC Programming	2	3	3
ACC 120	Prin. of Accounting I	3	2	4
ENG 114	Professional Research and Reporting	3	0	3
NET 110	Data Comm./Networking	2	2	3
		14	**13**	**19**

SUMMER - 1st Year				
CIS 152	Database Concepts and Apps.	2	2	3
CIS 215	Hardware Install./ Maintenance	2	3	3
ACC 150	Computerized General Ledger	1	2	2
		5	**7**	**8**
FALL - 2nd Year				
CIS 120	Spreadsheet I	2	2	3
CIS 162	Multimedia Presentation Software	2	2	3
CIS 172	Intro. to the Internet	2	3	3
CIS 245	Operating Systems - Multi-User	2	3	3
PSY 150	General Psychology	3	0	3
		11	**10**	**15**
SPRING - 2nd Year				
CIS 220	Spreadsheet II	1	2	2
CIS 296	Seminar in Information Systems	0	3	1
CIS 165	Desktop Publishing I	2	2	3
---- ----	CIS/CSC/NET Elective*			3-4
---- ----	Humanities Elective**	3	0	3
				12-13

* CIS/CSC/NET Electives:

CIS: 112, 113 118, 121, 122, 124, 126, 128, 144, 145, 146, 147, 148, 149, 153, 154, 155, 157, 160, 161, 163, 164, 166, 168, 169, 170, 173, 174, 175, 182, 184, 216, 217, 218, 219, 226, 227, 228, 244, 246, 247, 256, 260, 266, 267, 268, 276, 279, 286, 288, 289

CSC: 120, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 140, 141, 142, 145, 150, 152, 230, 237, 239, 240, 241, 242, 245, 246, 247, 248, 250, 260

NET: 115, 120, 260

**HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I

TOTAL HOURS: 68-70

INFORMATION SYSTEMS A 25 26 0
Evening Curriculum

CURRICULUM DESCRIPTION

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cr

FALL - 1st Year

CIS	111	Basic PC Literacy	1	2	2
CIS	115	Intro. to Prog. and Logic	2	2	3
OST	131	Keyboarding	1	2	2
			4	**6**	**7**

SPRING - 1st Year

CIS	130	Survey of Operating Systems	2	3	3
CSC	139	Visual BASIC Programming	2	3	3
			4	**6**	**6**

SUMMER - 1st Year

CIS	152	Database Concepts and Apps.	2	2	3
ENG	111	Expository Writing	3	0	3
ENG	111A	Expository Writing Lab	0	2	1
			5	**4**	**7**

FALL - 2nd Year

CIS	120	Spreadsheet I	2	2	3
CIS	162	Multimedia Presentation Software	2	2	3
			4	**4**	**6**

SPRING - 2nd Year

CIS	116	Intro. PC App. Development	2	3	3
NET	110	Data Comm./Networking	2	2	3
			4	**5**	**6**

SUMMER - 2nd Year

CIS	115	Intro. to Prog. and Logic	2	2	3
----	----	Humanities Elective**	3	0	3
			5	**2**	**6**

FALL - 3rd Year

CIS	172	Intro. to the Internet	2	3	3
CIS	245	Operating Systems - Multi-User	2	3	3
			4	**6**	**6**

SPRING - 3rd Year

ACC	120	Prin. of Accounting I	3	2	4
ENG	114	Professional Research and Reporting	3	0	3
			6	**2**	**7**

SUMMER - 3rd Year

ACC	150	Computerized General Ledger	1	2	2
----	----	CIS/CSC/NET Elective*			3-4
					5-6

FALL - 4th Year

PSY	150	General Psychology	3	0	3
MAT	115	Mathematical Models *OR*	2	2	3
MAT	161	College Algebra *AND*	(3)	(0)	(3)
MAT	161A	College Algebra Lab	(0)	(2)	(1)
			5	**2**	**6**
			(6)	**(4)**	**(7)**

SPRING - 4th Year

CIS	220	Spreadsheet II	1	2	2
CIS	165	Desktop Publishing I	2	2	3
			3	**4**	**5**

SUMMER - 4th Year

CIS	296	Seminar in Information Systems	0	3	1
			0	**3**	**1**

* CIS/CSC/NET Electives:

CIS: 112, 113 118, 121, 122, 124, 126, 128, 144, 145, 146, 147, 148, 149, 153, 154, 155, 157, 160, 161, 163, 164, 166, 168, 169, 170, 173, 174, 175, 182, 184, 216, 217, 218, 219, 226, 227, 228, 244, 246, 247, 256, 260, 266, 267, 268, 276, 279, 286, 288, 289

CSC: 120, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 140, 141, 142, 145, 150, 152, 230, 237, 239, 240, 241, 242, 245, 246, 247, 248, 250, 260

NET: 115, 120, 260

**HUMANITIES REQUIREMENT
Choose one of the following:

ART	111	Art Appreciation
MUS	110	Music Appreciation
PHI	215	Philosophical Issues
PHI	240	Intro to Ethics
SPA	111	Elementary Spanish I

TOTAL HOURS: 68

INFORMATION SYSTEMS A 25 26 D
Networking Administration and Support Concentration

CURRICULUM DESCRIPTION

Network Administration and Support is a concentration under the curriculum title of Information Systems. This curriculum prepares students to install and support networks and develops strong analytical skills and extensive computer knowledge.

Course work includes extensive hands-on experience with networks. Classes cover media types, topologies, and protocols with installation and support of hardware and software, troubleshooting network and computer problems, and administrative responsibilities. Elective choices provide opportunity for specialization individualization.

Graduates should qualify for positions such as: LAN/PC, Administrator, Microcomputer Support Specialist, Network Control Operator, Communications Technician/Analyst, Network/Computer Consultant, and Information Systems Specialist. Graduates are also prepared to sit for certification exams which can result in industry-recognized credentials.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
CIS 115	Intro. to Programming and Logic	2	2	3
CIS 130	Survey of Operating Systems	2	2	3
CIS 173	Network Theory	2	2	3
MAT 115	Math. Models	2	2	3
		9	**10**	**14**
SPRING - 1st Year				
CIS 174	Network System Manager I	2	2	3
CIS 282	Network Tech.	3	0	3
ENG 111	Expository Writing	3	0	3
NET 110	Data Comm./Networking	2	2	3
		10	**4**	**12**
SUMMER - 1st Year				
CIS 120	Spreadsheet I	2	2	3
CIS 215	Hardware Install./ Maintenance	3	2	3
CIS 274	Network System Manager II	2	2	3
		7	**6**	**9**

		Cl	Lb	Cr
FALL - 2nd Year				
BUS 151	People Skills	3	0	3
CIS 175	Network Mgmt. I	2	2	3
CIS 287	Network Support	2	2	3
ENG 114	Professional Research and Report	3	0	3
PSY 150	General Psychology	3	0	3
		13	**4**	**15**
SPRING - 2nd Year				
CIS 152	Database Concepts and Applications	2	2	3
CIS 184	TCP/IP and NFS	2	2	3
CIS 275	Network Mgmt. II	2	2	3
---- ----	CIS/CSC Elective			3
---- ----	Humanities/Fine Arts Selection*	3	0	3
		9	**6**	**15**

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I

* CIS/CSC Electives:

CIS: 112, 118, 121, 122, 124, 126, 128, 144, 145, 146, 147, 148, 149, 153, 154, 155, 157, 160, 161, 162, 163, 164, 165, 170, 172, 182, 216, 217, 218, 220, 226, 228, 244, 245, 246, 247, 256, 260, 276, 277, 286

CSC: 129, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 145, 150, 152

TOTAL HOURS: 65

INFORMATION SYSTEMS A 25 26 D
Networking Admin. and Support Concentration - Evening Curriculum

CURRICULUM DESCRIPTION

Network Administration and Support is a concentration under the curriculum title of Information Systems. This curriculum prepares students to install and support networks and develops strong analytical skills and extensive computer knowledge.

Course work includes extensive hands-on experience with networks. Classes cover media types, topologies, and protocols with installation and support of hardware and software, troubleshooting network and computer problems, and administrative responsibilities. Elective choices provide opportunity for specialization individualization.

Graduates should qualify for positions such as: LAN/PC, Administrator, Microcomputer Support Specialist, Network Control Operator, Communications Technician/Analyst, Network/Computer Consultant, and Information Systems Specialist. Graduates are also prepared to sit for certification exams which can result in industry-recognized credentials.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr

FALL - 1st Year

		Cl	Lb	Cr
CIS 111	Basic PC Literacy	1	2	2
CIS 130	Survey of Operating Systems	2	2	3
		3	4	5

SPRING - 1st Year

		Cl	Lb	Cr
CIS 152	Data Concepts and Applications	2	2	3
ENG 111	Expository Writing	3	0	3
		5	2	6

SUMMER - 1st Year

		Cl	Lb	Cr
NET 110	Data Communications/ Networking	2	2	3
CIS ----	Elective			3
		2	2	6

FALL - 2nd Year

		Cl	Lb	Cr
CIS 173	Network Theory	2	2	3
PSY 150	General Psychology	3	0	3
		5	2	6

SPRING - 2nd Year

		Cl	Lb	Cr
MAT 115	Math. Models	2	2	3
CIS 174	Network System Manager I	2	2	3
		4	4	6

SUMMER - 2nd Year

		Cl	Lb	Cr
CIS 274	Network System Manager II	2	2	3
CIS 215	Hardware Install/ Maintenance	3	2	3
		5	4	6

FALL - 3rd Year

		Cl	Lb	Cr
CIS 287	Network Support	2	2	3
ENG 114	Prof. Research and Reporting	3	0	3
		5	2	6

SPRING - 3rd Year

		Cl	Lb	Cr
CIS 282	Network Technology	3	0	3
BUS 151	People Skills	3	0	3
		6	0	6

SUMMER - - 3rd Year

		Cl	Lb	Cr
CIS 115	Intro. to Prog.and Logic	2	2	3
CIS 120	Spreadsheet I	2	2	3
		4	4	6

FALL - 4th Year

		Cl	Lb	Cr
CIS 175	Network Mgmt. I	2	2	3
---- ----	Humanities/Fine Arts Selection*	3	0	3
		5	2	6

SPRING - 4th Year

		Cl	Lb	Cr
CIS 275	Network Mgmt. II	2	2	3
CIS 184	TCP/IP and NFS	2	2	3
		4	4	6

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I

* CIS/CSC Electives:
    CIS: 112, 118, 121, 122, 124, 126, 128, 144, 145, 146, 147, 148, 149, 153, 154, 155, 157, 160, 161, 162, 163, 164, 165, 170, 172, 182, 216, 217, 218, 220, 226, 228, 244, 245, 246, 247, 256, 260, 276, 277, 286

    CSC: 129, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 145, 150, 152

TOTAL HOURS: 65

INFORMATION SYSTEMS A 25 26 E
Programming Concentration

CURRICULUM DESCRIPTION

Programming is a concentration under the curriculum title of Information Systems. This curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cr
Hours Per Week				

FALL - 1st Year

CIS	111	Basic PC Literacy	1	2	2
CIS	115	Intro to Prog & Logic	2	2	3
CSC	139	Introduction to Visual Basic	2	3	3
ENG	115	Oral Communication	3	0	3
MAT	115	Mathematical Models	3	0	3
			11	7	14

SPRING - 1st Year

CIS	130	Survey of Operating Systems	2	3	3
CSC	135	COBOL Programming	2	3	3
ENG	111	Expository Writing	3	0	3
NET	110	Data Communication/ Networking	2	2	3
PSY	150	General Psychology	3	0	3
			12	8	15

SUMMER - 1st Year

CIS	152	Database Concepts and Apps	2	2	3
CIS	244	Operating Systems - AS/400	2	3	3
		OR			
CIS	246	Operating Systems - UNIX	2	3	3
CIS	286	Systems Analysis and Design	3	0	3
ENG	114	Professional Research and Reports	3	0	3
			10	5	12

FALL - 2nd Year

CSC	134	C++ Programming	2	3	3
CSC	138	RPG Programming	2	3	3
CSC	143	Object-Oriented Programming	2	3	3
ACC	120	Principles of Accounting I	3	2	4
----	----	Humanities/Fine Arts Elective*	3	0	3
			12	11	16

SPRING - 2nd Year

CSC	235	Advanced COBOL	2	3	3
CSC	238	Advanced RPG	2	3	3
SEM	298	Seminar in Programming	2	3	3
CIS	288	Systems Project	1	4	3
			7	13	12

*HUMANITIES REQUIREMENT
Choose one of the following:

ART	111	Art Appreciation
MUS	110	Music Appreciation
PHI	215	Philosophical Issues
PHI	240	Intro to Ethics
SPA	111	Elementary Spanish I

TOTAL CREDIT HOURS: 69

INFORMATION SYSTEMS A 25 26 E
Programming Concentration - Evening Program

CURRICULUM DESCRIPTION

Programming is a concentration under the curriculum title of Information Systems. This curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr

FALL - 1st Year

CIS	111	Basic PC Literacy	1	2	2
CIS	115	Intro. to Prog & Logic	2	2	3
ENG	115	Oral Communication	3	0	3
			6	**4**	**8**

SPRING - 1st Year

CIS	130	Survey of Operating Systems	2	3	3
CSC	139	Intro. to Visual Basic	2	3	3
MAT	115	Mathematical Models	3	0	3
			7	**6**	**9**

SUMMER - 1st Year

ENG	111	Expository Writing	3	0	3
NET	110	Data Communication/ Networking	2	2	3
			5	**2**	**6**

FALL - 2nd Year

CIS	152	Database Concepts and Apps.	2	2	3
CSC	135	COBOL Programming	2	3	3
PSY	150	General Psychology	3	0	3
			7	**5**	**9**

SPRING - 2nd Year

CIS	244	Operating Systems - AS/400	2	3	3
		OR			
CIS	246	Operating Systems	2	3	3
ENG	114	Professional Research and Reports	3	0	3
----	----	Humanities/Fine Arts Elective	3	0	3
			8	**3**	**9**

SUMMER - 2nd Year

CIS	286	Systems Analysis and Design	3	0	3
CSC	134	C++ Programming	2	3	3
ACC	120	Principles of Accounting I	3	2	4
			8	**5**	**10**

FALL - 3rd Year

CIS	288	Systems Project	1	4	3
CSC	138	RPG Programming	2	3	3
CSC	143	Object-Oriented Programming	2	3	3
			5	**10**	**9**

SPRING - 3rd Year

CSC	238	Advanced RPG	2	3	3
CSC	235	Advanced COBOL	2	3	3
CSC	298	Seminar in Programming	2	3	3
			6	**9**	**9**

TOTAL CREDIT HOURS: 69

MACHINING TECHNOLOGY A 50 30 0

CURRICULUM DESCRIPTION

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations and make decisions to insure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies and in a wide range of specialty machining job shops.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
Hours Per Week			
FALL - 1st Year			
BPR 111 Blueprint Reading	1	2	2
ENG 115 Oral Communication	3	0	3
ISC 112 Industrial Safety	2	0	2
MAC 111 Machining Technology I	2	12	6
MAC 151 Machining Calculations	1	2	2
	9	**16**	**15**
SPRING - 1st Year			
BPR 121 Blueprint Reading: Mechanical	1	2	2
MAC 112 Machining Technology II	2	12	6
MAC 124 CNC Milling	1	3	2
MAT 120 Geometry and Trigonometry	2	2	3
MEC 145 Mfg. Materials and Processes	2	3	3
	8	**22**	**16**
SUMMER - 1st Year			
COE 110 World of Work	1	0	1
MAC 113 Machining Technology III	2	12	6
MAC 122 CNC Turning	1	3	2
	4	**15**	**9**
FALL - 2nd Year			
DFT 121 Intro to GD&T	1	2	2
ENG 111 Expository Writing	3	0	3
HYD 110 Hydraulics/Pneumatics	2	3	3
MAC 214 Machining Technology IV	2	12	6
MAC 247 Production Tooling	2	0	2
	10	**17**	**16**
SPRING - 2nd Year			
ECO 151 Survey of Economics	3	0	3
HUM 110 Technology and Society	3	0	3
ISC 111 Quality Control	2	0	2
MAC 241 Jigs & Fixtures I	2	6	4
MEC 110 Intro to CAD/CAM	1	2	2
WLD 112 Basic Welding Processes	1	3	2
	12	**11**	**16**

TOTAL CREDIT HOURS: 72

MANUFACTURING ENGINEERING TECHNOLOGY A 40 30 0

CURRICULUM DESCRIPTION

The Manufacturing Engineering Technology curriculum prepares individuals for employment in the fields of manufacturing technology. The curriculum emphasizes the theory and training required to effectively augment manufacturing engineers in industry.

Courses include a background in mechanical and related theory and the use of manufacturing and analytical equipment. Industrial standards such as EPA, OSHA, GD&T, and ISO are discussed. Computer usage for process control and effective communication skills is emphasized.

Graduates of this curriculum qualify for positions as engineering technicians. Some of the responsibilities include drafting, process specification, tooling selection, automation programming, project facilitation, and supervision. Certification is available through organizations such as ASQC, SME, and NICET.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
FALL - 1st Year			
CIS 111 Basic PC Literacy	1	2	2
DFT 111 Tech. Drafting I	2	6	4
ENG 111 Expository Writing	3	0	3
ISC 112 Industrial Safety	2	0	2
MAT 121 Algebra/Trigonometry I	2	2	3
	10	**10**	**14**
SPRING - 1st Year			
ENG 114 Prof. Res. & Rep.	3	0	3
MAT 122 Algebra/Trigonometry II	2	2	3
MEC 111 Machine Processes I	2	3	3
MEC 180 Engineering Materials	2	3	3
PHY 131 Physics - Mechanics	3	2	4
	12	**10**	**16**
SUMMER - 1st Year			
DFT 151 CAD I	2	3	3
HYD 110 Hydr. & Pneumatics	2	3	3
MAT 223 Applied Calculus	2	2	3
PHY 132 Physics - Electr. & Mang.	3	2	4
	9	**10**	**13**
FALL - 2nd Year			
ELC 111 Intro. to Electricity	2	2	3
ISC 132 Mfg. Quality Control	2	3	3
MEC 161 Mfg. Processes I	3	0	3
MEC 161A Mfg. Processes I (lab)	0	3	1
MEC 237 Control Systems	3	2	4
MEC 251 Statics	2	2	3
	12	**12**	**17**
SPRING - 2nd Year			
ENG 131 Introduction to Literature	3	0	3
ISC 151 Plant Layout	2	2	3
MEC 252 Strength of Materials	2	2	3
MEC 280 Robotics and CIM	3	2	4
PSY 150 General Psychology	3	0	3
	13	**6**	**16**

TOTAL CREDIT HOURS: 76

MANUFACTURING TECHNOLOGY A 50 32
Integrated Operations Concentration

This curriculum was under development at the time of printing. Pending state approval, it will be offered to students at Forsyth Technical Community College through an agreement with Guilford Technical Community College. For additional information about Manufacturing Technology, call (910) 723-0371, Ext. 7253.

CURRICULUM COURSES

Course Title		Cl	Lb	Cr
		Hours Per Week		

GENERAL EDUCATION CORE

Communications require six SHC for degree or three SHC for diploma. Humanities/Fine Arts, Social/Behavioral Science and Natural Sciences/Mathematics all require three SHC.

			Cl	Lb	Cr
COM 231	Public Speaking		3	0	3
ENG 111	Expository Writing		3	0	3
ENG 114	Professional Research and Reporting		3	0	3
HUM 101	Values in the Workplace		3	0	3
	OR				
---- ----	Humanities/Fine Arts Elective		3	0	3
MAT 120	Geometry and Trigonometry		2	2	3
MAT 121	Algebra/Trigonometry I		2	2	3
PSY 135	Group Processes		3	0	3
	OR				
---- ----	Social/Behavioral Science Elective		3	0	3

MAJOR COURSES

A. Core

  1. Required Core Courses

ISC	112	Industrial Safety	2	0	2
ISC	132	Mfg Quality Control	2	3	3
ISC	133	Mfg Management Practices	2	0	2
MEC 145		Mfg Materials and Processes	2	3	3

  2. Required Core Subject Areas (if applicable)

BPR	111	Blueprint Reading	1	2	2

B. Concentration (if applicable)

  1. Required Concentration Courses

MEC 287	Applied Mfg Operations Project	0	4	2
MEC 115	Machining Tech III w/Heat	2	12	6
MEC 150	Intro to Elec/Ind Systems	1	3	2
MEC 160	Mechanical Industrial Systems	1	3	2
MEC 263	Electro-Pneumatic Components	2	4	4
MAC 115	Grinding Operations	2	2	3

  2. Required Concentration Subject Areas

DFT 117	Technical Drafting	1	2	2
DFT 121	Intro to G D and T	1	2	2
CIS 110	Introduction to Computers	2	2	3
MAC 111	Machining Technology I	2	12	6
MAC 112	Machining Technology II	2	12	6
HYD 110	Hydraulics/Pneumatics	2	3	3
PLA 110	Intro to Plastics	2	0	2

  3. Other Major Courses

Select a maximum of 9 SHC from identified prefixes with the exception of no maximum for prefixes in the core or concentration.

OTHER REQUIRED COURSES

Maximum of 7 for AAS, 4 SHC for diploma, and 1 SHC for certificate. These may include electives, orientation, study skills and other college or departmental graduation requirements.

TOTAL CREDIT HOURS: 76

MECHANICAL ENGINEERING TECHNOLOGY A 40 32 A
Drafting and Design Concentration

CURRICULUM DESCRIPTION

The Mechanical Engineering Technology curriculum prepares graduates for employment as mechanical technicians. Typical assignments would include assisting in the design, development, testing and repair of mechanical equipment. Emphasis is placed on the integration of theory and mechanical principles.

Coursework includes applied mechanics, manufacturing methods and processes, computer usage, computer-aided drafting, mathematics, physics, and oral and written communications. The courses will stress critical thinking, planning, and problem solving.

Graduates of the curriculum will find employment opportunities in the diversified branches of the mechanical field. Mechanical engineering technicians are employed in many types of manufacturing, fabrication, research and development, and service industries.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
DFT 111	Tech. Drafting I	2	6	4
ENG 111	Expository Writing	3	0	3
MAT 121	Algebra/Trig I	3	0	3
PSY 150	General Psychology	3	0	3
		12	8	15
SPRING - 1st Year				
DFT 112	Technical Drafting II	2	6	4
ENG 114	Prof. Res. & Report.	3	0	3
MAT 122	Algebra/Trig II	3	0	3
MEC 111	Machine Processes I	2	3	3
PHY 131	Physics - Mechanics	3	2	4
		13	11	17
SUMMER - 1st Year				
DDF 211	Design Drafting I	1	6	4
DFT 151	CAD I	2	3	3
HYD 110	Hydraulics & Pneumatics	2	3	3
		5	12	10
FALL - 2nd Year				
DDF 212	Design Drafting II	1	6	4
DDF 214	Tool Design	2	4	4
DFT 152	CAD I	2	3	3
MEC 251	Statics	2	2	3
		7	15	14
SPRING - 2nd Year				
DDF 213	Design Drafting III	1	6	4
DFT 121	Intro to GD&T	1	2	2
DFT 153	CAD III	2	3	3
ENG 131	Intro to Literature	3	0	3
MEC 180	Engineering Materials	2	3	3
MEC 252	Strength of Materials	2	2	3
		11	16	18

TOTAL CREDIT HOURS: 74

MECHANICAL ENGINEERING TECHNOLOGY A 40 32
Fire Sprinkler Design Concentration

Pending state approval, this consortium curriculum will be offered to students at Forsyth Technical Community College through an agreement with Guilford Technical Community College. For additional information about Fire Sprinkler Design Concentration, call (910) 723-0371, Ext. 7253.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 110	Intro to Computers	2	2	3
DFT 111	Technical Drafting I	2	6	4
DFT 151	Computer Aided Drafting I	2	3	3
ENG 111	Expository Writing	3	0	3
MAT 121	Algebra/Trigonometry I	2	2	3
		11	**13**	**16**
SPRING - 1st Year				
COM 231	Public Speaking	3	0	3
ENG 114	Professional Research and Reporting	3	0	3
FSD 140	Codes and Standards	3	0	3
FSD 144	Water Supply	3	0	3
FSD 151	Fire Sprinkler Design I	2	2	3
MAT 122	Algebra/Trigonometry II	2	2	3
		16	**4**	**18**
SUMMER - 1st Year				
DFT 152	Computer Aided Drafting II	2	3	3
FSD 152	Fire Sprinkler Design II	2	2	3
PHY 151	College Physics	3	2	4
		7	**7**	**10**
FALL - 2nd Year				
FSD 148	Materials/Hangers/Device and Hydraulic Calculations	3	0	3
FSD 251	Fire Sprinkler Design III	2	2	3
MEC 250	Statics and Strength of Materials	4	3	5
OMT 160	Ethical Issues in Oper. Mgmt.	3	0	3
--- ---	Social/Behavioral Sci. Elective	3	0	3
		15	**5**	**17**
SPRING - 2nd Year				
FSD 210	Loss Control Procedures	3	0	3
FSD 220	Construction Documents	3	0	3
FSD 230	Estimating	2	2	3
FSD 252	Fire Sprinkler Design IV	2	2	3
--- ---	Humanities/Fine Arts Elective	3	0	3
		13	**4**	**15**

TOTAL CREDIT HOURS: 76

MEDICAL ASSISTING A 45 40 0

CURRICULUM DESCRIPTION

The Medical Assisting curriculum prepares multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures.

Course work includes instruction in scheduling appointments, coding and processing insurance accounts, billing, collections, medical transcription, computer operations; assisting with examinations/treatments, performing routine laboratory procedures, electrocardiography, supervised medication administration; and ethical/legal issues associated with patient care.

Graduates of CAAHEP accredited medical assisting programs may be eligible to sit for the American Association of Medical Assistants' Certification Examination to become Certified Medical Assistants. Employment opportunities include physician's offices, health maintenance organizations, health department, and hospitals.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cn	CR
FALL - 1st Year				
ACC 120 Principles of Accounting I	3	2	0	4
CIS 111 Basic PC Literacy	1	2	0	2
MAT 110 Math Measurement	2	2	0	3
MED 110 Intro Med. Asst.	1	0	0	1
MED 121 Med. Term. I	3	0	0	3
OST 131 Keyboarding	1	2	0	2
	11	8	0	15
SPRING - 1st Year				
ENG 111 Expository Writing 3	3	0	0	
MED 122 Med. Term II	3	0	0	3
MED 116 Intro to A&P	3	2	0	4
MED 130 Admin. Office Proc I	1	2	0	2
OST 134 Text Entry and Formatting	3	2	0	4
---- ---- Humanities/Fine Arts Elective*	3	0	0	3
	16	6	0	19
SUMMER - 1st Year				
MED 118 Medical Law and Ethics	2	0	0	2
MED 131 Admin. Office Proc II	1	2	0	2
MED 140 Exam Room Proc I	3	4	0	5
	6	6	0	9
FALL - 2nd Year				
MED 134 Med. Transcription	2	2	0	3
MED 150 Lab Proc I	3	4	0	5
MED 272 Drug Therapy	3	0	0	3
PSY 150 General Psychology	3	0	0	3
	11	6	0	14
SPRING - 2nd Year				
ENG 115 Oral Communications	3	0	0	3
MED 260 Clinical Lab	0	0	15	5
MED 262 Clinical Prospectives	1	0	0	1
MED 276 Patient Education	1	2	0	2
	5	2	15	11

*HUMANITIES/FINE ARTS ELECTIVE
Choose one of the following:
ART 111   Art Appreciation
MUS 110   Music Appreciation
PHI 215   Philosophical Issues
PHI 240   Intro. to Ethics
SPA 111   Elementary Spanish I
          (H.S. required)

TOTAL CREDIT HOURS: 68

MEDICAL LABORATORY TECHNOLOGY A 45 42 0

This consortium curriculum is offered to students at Forsyth Technical Community College through an agreement with Davidson County Community College.

CURRICULUM DESCRIPTION

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease.

Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance, and reporting/recording and interpreting findings involving tissues, blood, and body fluids.

Graduates may be eligible to take examinations given by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists or the National Certifying Agency. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cn	Cr
FALL - 1st Year					
BIO 163*	Basic Anatomy and Physiology	4	2	0	5
CHM 130*	Gen., Org., and Biochemistry	3	0	0	3
CHM 130A*	Gen., Org., and Biochemistry Lab	0	2	0	1
MAT 140	Survey of Mathematics	3	0	0	3
MLT 110	Intro to Med Lab Tech	2	3	0	3
MLT 140	Intro to Microbiology	2	3	0	3
		14	**10**	**0**	**18**
SPRING - 1st Year					
ENG 111*	Expository Writing	3	0	0	3
MLT 111	Urinalysis and Body Fluids	1	3	0	2
MLT 120	Hematology/Hemostasis	3	3	0	4
MLT 125	Immunohematology I	4	3	0	5
PSY 150*	General Psychology	3	0	0	3
		14	**9**	**0**	**17**
SUMMER - 1st Year					
COM 110	Intro to Communication	3	0	0	3
ENG 113*	Literature-Based Research	3	0	0	3
MLT 130	Clinical Chemistry	3	3	0	4
		9	**3**	**0**	**10**
FALL - 2nd Year					
MLT 216	Professional Issues	0	2	0	1
MLT 240	Special Clinical Microbiology	2	3	0	3
MLT 257	MLT Practicum I	0	0	24	8
		2	**5**	**24**	**12**
SPRING - 2nd Year					
MLT 215	Professional Issues	1	0	0	1
MLT 269	MLT Practicum II	0	0	33	11
		1	**0**	**33**	**12**

*These courses will be taught on the Forsyth Tech campus. All other courses will be taught on the Davidson County Community College campus.

Forsyth Tech Medical Laboratory Technology applicants MUST complete 2 units of high school algebra and 1 unit each of biology and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 69

MEDICAL SONOGRAPHY A 45 44 0

CURRICULUM DESCRIPTION

The Medical Sonography curriculum provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures.

Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills.

Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and speciality examinations administered by the American Registry of Diagnostic Medical Sonographers and find employment in clinics, physicians' offices, mobile services, hospital and educational institutions.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cn	Cr
FALL - 1st Year					
BIO 163	Basic Anatomy and Physiology	4	2	0	5
ENG 111	Expository Writing	3	0	0	3
PHY 125	Health Science Physics	3	2	0	4
SON 110	Intro to Sonography	1	3	3	3
SON 130	Abdominal SON I	2	3	0	3
		13	**10**	**3**	**18**
SPRING - 1st Year					
ENG 114	Professional Research and Reporting	3	0	0	3
SON 111	Sonographic Physics	3	3	0	4
SON 120	SON Clinical Ed I	0	0	15	5
SON 131	Abdominal SON II	1	3	0	2
SON 140	Gynecological SON	2	0	0	2
		9	**6**	**15**	**16**
SUMMER - 1st Year					
PSY 150	General Psychology	3	0	0	3
SON 121	SON Clinical Ed II	0	0	15	5
		3	**0**	**15**	**8**
FALL - 2nd Year					
ACA 220	Professional Transition	1	0	0	1
SON 220	SON Clinical Ed III	0	0	24	8
SON 225	Case Studies	0	3	0	1
SON 241	Obstetrical SON I	2	0	0	2
SON 274	Neurosonology	2	0	0	2
---- ----	Humanities Requirement *	3	0	0	3
		8	**3**	**24**	**17**
SPRING - 2nd Year					
SON 221	SON Clinical Ed IV	0	0	24	8
SON 242	Obstetrical SON II	2	0	0	2
SON 250	Vascular Sonography	1	3	0	2
SON 272	Advanced Pathology	0	3	0	1
SON 276	Fetal Echocardiography	1	0	0	1
SON 289	Sonographic Topics	2	0	0	2
		6	**6**	**24**	**16**

Hours Per Week (Cl Lb Cn Cr)

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111   Art Appreciation
MUS 110   Music Appreciation
PHI 215   Philosophical Issues
PHI 240   Intro. to Ethics
SPA 111   Elementary Spanish I

Forsyth Tech Medical Sonography applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 75

NUCLEAR MEDICINE TECHNOLOGY A 45 46 0

CURRICULUM DESCRIPTION

The Nuclear Medicine Technology curriculum provides the clinical and didactic experience necessary to prepare students to qualify as entry-level Nuclear Medicine Technologists.

Students will acquire the knowledge and skills necessary to properly perform clinical procedures. These skills include patient care, use of radioactive materials, operation of imaging and counting instrumentation, and laboratory procedures.

Graduates may be eligible to apply for certification/registration examinations given by the Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cn	Cr
FALL - 1st Year					
BIO 163	Basic Anatomy and Physiology	4	2	0	5
CHM 130	General, Organic and Biochemistry	3	0	0	3
CHM 130A	General, Organic & Biochemistry Lab	0	3	0	1
ENG 111	Expository Writing	3	0	0	3
ENG 115	Oral Communication	3	0	0	3
MAT 115	Mathematical Models	2	2	0	3
		15	**7**	**0**	**18**
SPRING - 1st Year					
MAT 151	Statistics I	3	0	0	3
NMT 110	Intro to Nuclear Med.	2	0	0	2
NMT 110A	Intro to Nuclear Medicine Lab	0	3	0	1
NMT 126	Nuclear Physics	2	0	0	2
PHY 125	Health Sciences Physics	3	2	0	4
PSY 150	General Psychology	3	0	0	3
---- ----	Humanities Requirement *	3	0	0	3
		16	**5**	**0**	**18**
SUMMER - 1st Year					
NMT 132	Overview - Clinical Nuclear Medicine	2	0	6	4
NMT 134	Nuclear Pharmacy	2	0	0	2
NMT 136	Health Physics	2	0	0	2
		6	**0**	**6**	**8**

Course Title		Cl	Lb	Cn	Cr
FALL - 2nd Year					
NMT 211	NMT Clinical Practice I	0	0	21	7
NMT 212	Procedures for Nuclear Medicine I	2	0	0	2
NMT 212A	Procedures for Nuclear Med. Lab	0	3	0	1
NMT 214	Radiobiology	2	0	0	2
NMT 215	Non-Imaging Instrumentation	1	3	0	2
NMT 218	Computers in Nuclear Med.	2	0	0	2
		7	**6**	**21**	**16**
SPRING - 2nd Year					
NMT 221	Nuclear Medicine Technology Clinical Practice II	0	0	21	7
NMT 222	Procedures for Nuclear Med. II	2	0	0	2
NMT 222A	Procedures for Nuclear Medicine Lab	0	3	0	1
NMT 224	In Vitro Procedures	2	0	0	2
NMT 224A	In Vitro Proc Lab	0	3	0	1
NMT 225	Imaging Instrumentation	1	3	0	2
		5	**9**	**21**	**15**

*HUMANITIES REQUIREMENT
Choose one of the following:

ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I

Forsyth Tech Nuclear Medicine Technology applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 75

OCCUPATIONAL THERAPY ASSISTANT A 45 50 0

This consortium curriculum is offered to students at Forsyth Technical Community College through an agreement with Rockingham Community College.

CURRICULUM DESCRIPTION

The Occupational Therapy Assistant curriculum prepares individuals to work under the supervision of a registered/licensed occupational therapist in screening, assessing, planning, and implementing treatment and documenting progress for clients receiving occupational therapy services.

Course work includes human growth and development, conditions which interfere with activities of daily living, theory and process of occupational therapy, individual/group treatment activities, therapeutic use of self, activity analysis, and grading/adapting activities and environments.

Graduates may be eligible to take the national certification examination for practice as a certified occupational therapy assistant. Employment opportunities include hospitals, rehabilitation facilities, long-term/extended care facilities, sheltered workshops, schools, home health programs, and community programs.

CURRICULUM BY SEMESTERS

Course Title			Cl	Lb	Cn	Cr
FALL - 1st Year						
BIO	168*	Anatomy and Physiology	3	3	0	4
CIS	113*	Computer Basics	0	2	0	1
OTA	110	Fundamentals of OT	2	3	0	3
OTA	120	OT Media I	1	3	0	2
OTA	130	Assessment Skills	2	3	0	3
OTA	140	Professional Skills I	0	3	0	1
OTA	161	Fieldwork I Placement 1	0	0	3	1
OTA	162	Fieldwork I Placement 2	0	0	3	1
OTA	163	Fieldwork I Placement 3	0	0	3	1
PSY	150*	General Psychology	3	0	0	3
			11	**17**	**9**	**20**

Hours Per Week

Course Title			Cl	Lb	Cn	Cr
SPRING - 1st Year						
BIO	169*	Anatomy and Physiology II	3	3	0	4
ENG	111*	Expository Writing	3	0	0	3
OTA	150	Life Span Skills I	2	3	0	3
OTA	220	OT Media II	1	6	0	4
OTA	240	Professional Skills II	0	3	0	1
PSY	241*	Developmental Psych	3	0	0	3
PSY	281*	Abnormal Psychology	3	0	0	3
			15	**15**	**0**	**21**

			Cl	Lb	Cn	Cr
SUMMER - 1st Year						
ENG	114*	Professional Research and Reporting	3	0	0	3
OTA	170	Physical Dysfunction	2	3	0	3
OTA	180	Psychosocial Dysfunction	2	3	0	3
OTA	225	OT Media III	1	3	0	2
OTA	245	Professional Skills II	1	3	0	2
OTA	250	Life Span Skills II	2	3	0	3
----	----*	Humanities Elective**	3	0	0	3
			14	**15**	**0**	**19**

			Cl	Lb	Cn	Cr
FALL - 2nd Year						
OTA	260	Fieldwork II Placement 1	0	0	18	6
OTA	261	Fieldwork II Placement 2	0	0	18	6
OTA	280	Professional Transitions	0	2	0	1
			0	**2**	**36**	**13**

*These courses will be taught on the Forsyth Tech campus. All other courses will be taught on the Rockingham Community College campus.

**HUMANITIES REQUIREMENT
Choose one of the following:
ART 111   Art Appreciation
MUS 110   Music Appreciation
PHI 215   Philosophical Issues
PHI 240   Intro to Ethics
SPA 111   Elementary Spanish I

TOTAL CREDIT HOURS: 73

OFFICE SYSTEMS TECHNOLOGY A 25 36 0

CURRICULUM DESCRIPTION

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management. Graduates receive preparation to take the Certified Professional Secretary (CPS) exam.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab	0	2	1
MAT 115	Mathematical Models	2	2	3
OST 131	Keyboarding	1	2	2
OST 162	Executive Terminology	3	0	3
		10	**8**	**14**
SPRING - 1st Year				
BUS 115	Business Law I	3	0	3
BUS 121	Business Math	2	2	3
CIS 152	Data Base Concepts and Apps.	2	2	3
OST 134	Text Entry and Formatting	3	2	4
OST 136	Word Processing	1	2	2
		11	**8**	**15**
SUMMER - 1st Year				
OST 135	Adv Text Entry and Format	3	2	4
OST 164	Text Editing Applications	3	0	3
PSY 150	General Psychology	3	0	3
		9	**2**	**10**
FALL - 2nd Year				
ACC 120	Principles of Accounting I	3	2	4
ENG 114	Pro Research and Reporting	3	0	3
OST 223	Machine Transcription I	1	2	2
OST 236	Advanced Word/Inform. Proc	2	2	3
---- ----	Humanities/Fine Arts Selection	3	0	3
		12	**6**	**15**
SPRING - 2nd Year				
ACC 150	Computerized Gen Ledger	1	2	2
BUS 125	Personal Finance	3	0	3
CIS 120	Spreadsheet I	2	2	3
ENG 115	Oral Communication	3	0	3
OST 224	Machine Transcription II	1	2	2
OST 289	Office Systems Management	2	2	3
		12	**8**	**16**

TOTAL CREDIT HOURS: 70

OFFICE SYSTEMS TECHNOLOGY A 25 36 0
Evening Curriculum

CURRICULUM DESCRIPTION

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management. Graduates receive preparation to take the Certified Professional Secretary (CPS) exam.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
FALL - 1st Year			
CIS 111 Basic PC Literacy	1	2	2
ENG 111 Expository Writing	3	0	3
ENG 11A Expository Writing Lab	0	2	1
OST 131 Keyboarding	1	2	2
	5	6	8
SPRING - 1st Year			
MAT 115 Mathematical Models	3	0	3
OST 134 Text Entry and Formatting	3	2	4
OST 162 Executive Terminology	3	0	3
	9	2	10
SUMMER - 1st Year			
BUS 115 Business Law I	3	0	3
OST 136 Word Processing	1	2	2
	4	2	5
FALL - 2nd Year			
BUS 121 Business Math	2	2	3
OST 135 Adv Text Entry and			
Format	3	2	4
	5	4	7

Course Title	Cl	Lb	Cr
SPRING - 2nd Year			
CIS 152 Database Concepts and			
Apps	2	2	3
ENG 114 Prof Research and			
Reporting	3	0	3
OST 164 Text Editing Applications	3	0	3
	8	2	9
SUMMER - 2nd Year			
PSY 150 General Psychology	3	0	3
---- ---- Humanities/Fine Arts			
Selection	3	0	3
	6	0	6
FALL - 3rd Year			
ACC 120 Prin of Accounting I	3	2	4
OST 236 Advanced Word/			
Information Proc	2	2	3
	5	4	7
SPRING - 3rd Year			
ACC 150 Computerized Gen			
Ledger	1	2	2
BUS 125 Personal Finance	3	0	3
CIS 120 Spreadsheet I	2	2	3
	6	4	8
SUMMER - 3rd Year			
ENG 115 Oral Communication	3	0	3
OST 223 Machine Transcription I	1	2	2
	4	2	5
FALL - 4th Year			
OST 224 Machine Transcription II	1	2	2
OST 289 Office Systems			
Management	2	2	3
	3	4	5

TOTAL CREDIT HOURS: 70

PARALEGAL TECHNOLOGY A 25 38 0

This curriculum will be offered to students at Forsyth Technical Community College through an agreement with Surry Community College.

CURRICULUM DESCRIPTION

The Paralegal Technology curriculum prepares individuals to work under the supervision of attorneys by performing routine legal tasks and assisting with substantive legal work. A paralegal/legal assistant may not practice law, give legal advice, or represent clients in a court of law.

Course work includes substantive and procedural legal knowledge in the areas of civil litigation, legal research and writing, real estate, family law, wills, estates, trusts, and commercial law. Required courses also include subjects such as English, mathematics, and computer utilization.

Graduates are trained to assist attorneys in probate work, investigations, public records search, drafting and filing legal documents, research, and office management. Employment opportunities are available in private law firms, governmental agencies, banks, insurance agencies, and other business organizations.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cn	Cr
FALL - 1st Year					
ACA ----	Elective	1	0	0	1
ENG 111	Expository Writing	3	0	0	3
LEX 110	Intro. Paralegal Study	2	0	0	2
LEX 120	Legal Research and Writing I	2	0	0	3
MAT 115	Mathematical Models	2	0	0	3
OST 131	Keyboarding	1	2	0	2
		11	**2**	**0**	**14**
SPRING - 1st Year					
CIS 110	Introduction to Computers	2	2	0	3
LEX 121	Legal Research and Writing II	2	2	0	3
LEX 130	Civil Injuries	2	0	0	2
LEX 140	Civil Litigation I	3	0	0	3
OST 134	Text Entry and Formatting	3	2	0	4
		12	**6**	**0**	**15**
SUMMER - 1st Year					
ACC 120	Principles of Acct. I	3	2	0	4
LEX 141	Civil Litigation II	2	2	0	3
LEX 150	Commercial Law	2	2	0	3
		7	**6**	**0**	**10**
FALL - 2nd Year					
ENG 114	Professional Rsearch/ Reporting	3	0	0	3
LEX 160	Criminal Law and Procedure	2	2	0	3
LEX 210	Real Property I	2	0	0	2
LEX 240	Family Law	2	0	0	2
LEX 260	Bankruptcy and Collections	2	0	0	2
---- ----	Social Science Elective	3	0	0	3
		14	**2**	**0**	**15**
SPRING - 2nd Year					
COE 111	Co-op Work Experience or Elective	0	0	10	1
COE 115	Work Experience Seminar or Elective	1	0	0	1
LEX 211	Real Property II	1	4	0	3
LEX 250	Wills, Estates, and Trusts	2	2	0	3
LEX 270	Law Office Mgt/Technology	1	2	0	2
OST 137	Office Software Applications	1	2	0	2
---- ----	Humanities/Fine Arts Elective	3	0	0	3
		9	**10**	**10**	**15**

TOTAL CREDIT HOURS: 69

This consortium curriculum is offered to students at Forsyth Technical Community College through an agreement with Caldwell Community College and Technical Institute.

CURRICULUM DESCRIPTION

The physical therapist assistant curriculum prepares the graduate to assist the professional physical therapist in a variety of direct patient care services delegated by the supervising therapist to restore function by alleviation or prevention of physical therapy service. The graduate is eligible to take the licensing examination given by the North Carolina Board of Physical Therapy Examiners.

Suggested high school courses for individuals desiring a career as s physical therapist assist would include biology, algebra, and possibly chemistry.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week			
		Cl	Lb	Cn	Cr
SUMMER - 1st Year					
BIO 168*	Anatomy and Physiology I	3	3	0	4
ENG 111*	Expository Writing	3	0	0	3
ENG 111A	Expository Writing Lab	0	2	0	1
PSY 150*	General Psychology	3	0	0	3
		9	**5**	**0**	**11**
FALL - 1st Year					
BIO 169*	Anatomy and Physiology II	3	3	0	4
CIS 113*	Computer Basics	0	2	0	1
COM 231	Public Speaking	3	0	0	3
ENG 112*	Argument-Based Research	3	0	0	3
PHY 110*	Conceptual Physics	3	0	0	3
PSY 241*	Developmental Psychology	3	0	0	3
---- ----	Humanities/Fine Arts Elective**	2	0	0	2
		17	**5**	**0**	**19**
SPRING - 1st Year					
PTA 110	Intro to Physical Therapy	2	3	0	3
PTA 125	Gross and Functional Anatomy	3	6	0	5
PTA 135	Pathology	4	0	0	4
		9	**9**	**0**	**12**
SUMMER - 2nd Year					
PTA 145	Therapeutic Procedures	2	6	0	4
PTA 212	Health Care/ Resources	2	0	0	2
PTA 222	Professional Interaction	2	0	0	2
		6	**6**	**0**	**8**
FALL - 2nd Year					
PTA 215	Therapeutic Exercise	2	3	0	3
PTA 225	Intro to Rehabilitation	3	3	0	4
PTA 165	PTA Clinical I	0	0	9	3
PTA 185	PTA Clinical II	0	0	9	3
		5	**6**	**18**	**13**
SPRING - 2nd Year					
PTA 235	Neurological Rehabilitation	3	6	0	5
PTA 245	PTA Clinical III	0	0	12	4
PTA 255	PTA Clinical IV	0	0	12	4
		3	**6**	**24**	**13**

*These courses will be taught on the Forsyth Tech campus. All other courses will be taught on the Caldwell Community College and Technical Institute campus.

**HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish

TOTAL CREDIT HOURS: 76

RADIATION THERAPY TECHNOLOGY A 45 68 0

CURRICULUM DESCRIPTION

The Radiation Therapy Technology curriculum is designed to train students to work in conjunction with nurses, physicists, and physicians in the application of prescribed doses of ionizing radiation for the treatment of disease, primarily cancer.

Course work includes physics, anatomy and physiology, dosimetry, and clinical oncology. The student will be skilled in treatment management, administration of prescribed radiation treatment, and provision of patient support.

Graduates may be eligible to sit for the National Radiation Therapy Exam, given by the American Registry of Radiologic Technologists. Employment opportunities can be found in hospitals and freestanding cancer centers.

CURRICULUM BY SEMESTERS

Course Title			Hours Per Week			
			Cl	Lb	Cn	Cr
FALL - 1st Year						
BIO	163	Basic Anatomy and Physiology	4	2	0	5
RAD	110	Rad Intro and Patient Care	2	3	0	3
RAD	111	RAD Procedures I	3	3	0	4
RAD	151	RAD Clinical Ed I	0	0	6	2
			9	8	6	14
SPRING - 1st Year						
ENG	111	Expository Writing	3	0	0	3
ENG	115	Oral Communication	3	0	0	3
PSY	150	General Psychology	3	0	0	3
RAD	121	Radiographic Imaging I	2	3	0	3
RTT	151	RTT Clinical Ed II	0	0	9	3
			11	3	9	15
SUMMER - 1st Year						
RTT	121	Special Imaging	2	0	0	2
RTT	161	RTT Clinical Ed III	0	0	6	2
----	----	Humanities Requirement *	3	0	0	3
			5	0	6	7
FALL - 2nd Year						
RTT	210	Radiobiology	2	0	0	2
RTT	220	Rad Therapy Orientation	2	0	0	2
RTT	221	Clinical Oncology I	2	0	0	2
RTT	230	Radiation Therapy Physics	3	0	0	3
RTT	238	RTT Clinical Ed IV	0	2	15	6
			9	2	15	15

			Cl	Lb	Cn	Cr
SPRING - 2nd Year						
BIO	271	Pathophysiology	3	0	0	3
RTT	222	Clinical Oncology II	2	0	0	2
RTT	231	Dosimetry	3	0	0	3
RTT	239	RTT Clinical Ed V	0	2	18	7
			8	2	18	15
SUMMER - 2nd Year						
ACA	220	Professional Transition	1	0	0	1
RTT	232	Rad Therapy Procedures	2	0	0	2
RTT	246	RTT Clinical Ed VI	0	0	18	6
			3	0	18	9

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish

Forsyth Tech Radiation Therapy Technology applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 75

CURRICULUM DESCRIPTION

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographer. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cn	Cr
FALL - 1st Year				
BIO 163 Basic Anatomy and Physiology	4	2	0	5
ENG 111 Expository Writing	3	0	0	3
RAD 110 Rad Intro and Patient Care	2	3	0	3
RAD 111 RAD Procedures I	3	3	0	4
RAD 151 RAD Clinical Ed I	0	0	6	2
	12	**8**	**6**	**17**
SPRING - 1st Year				
ENG 114 Professional Research and Reporting	3	0	0	3
PSY 150 General Psychology	3	0	0	3
RAD 112 RAD Procedures II	3	3	0	4
RAD 121 Radiographic Imaging I	2	3	0	3
RAD 161 RAD Clinical Ed II	0	0	15	5
	11	**6**	**15**	**18**
SUMMER - 1st Year				
RAD 122 Radiographic Imaging II	1	3	0	2
RAD 131 Radiographic Physics I	1	3	0	2
RAD 171 RAD Clinical Ed III	0	0	12	4
---- ---- Humanities Requirement *	3	0	0	3
	5	**6**	**12**	**11**

	Cl	Lb	Cn	Cr
FALL - 2nd Year				
RAD 211 RAD Procedures III	2	3	0	3
RAD 231 Radiographic Physics II	1	3	0	2
RAD 241 Radiation Protection	2	0	0	2
RAD 251 RAD Clinical Ed IV	0	0	21	7
SOC 210 Introduction to Sociology	3	0	0	3
	8	**6**	**21**	**17**
SPRING - 2nd Year				
ACA 220 Professional Transition	1	0	0	1
RAD 245 Radiographic Analysis	2	3	0	3
RAD 261 RAD Clinical Ed V	0	0	21	7
RAD 282 RAD Clinical Elective	0	0	6	2
	3	**3**	**27**	**13**

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I

Forsyth Tech Radiography applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 76

RESPIRATORY CARE A 45 72 0

CURRICULUM DESCRIPTION

The Respiratory Care curriculum prepares individuals to function as Respiratory Care Technicians and/or Respiratory Care Therapists. In these roles, individuals perform diagnostic testing, treatments, and management of patients with heart and lung diseases.

Students will master skills in patient assessment and treatment of cardiopulmonary diseases. These skills include life support, monitoring, drug administration, and treatment of patients of all ages in a variety of settings.

Graduates of accredited programs may be eligible to take entry level examinations from the National Board of Respiratory Care. Therapy graduates may also take Advanced Practitioner. Graduates may be employed in hospitals, clinics, nursing homes, education, industry, and home care.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week			
		Cl	Lb	Cn	Cr
FALL - 1st Year					
BIO 163	Basic Anatomy and Physiology	4	2	0	5
ENG 111	Expository Writing	3	0	0	3
RCP 110	Intro to Respiratory Care	3	3	0	4
RCP 122	Special Practice Lab	0	2	0	1
RCP 132	RCP Clinical Practice I	0	0	6	2
		10	**7**	**6**	**15**
SPRING - 1st Year					
RCP 111	Therapeutics/ Diagnostics	4	3	0	5
RCP 113	RCP Pharmacology	2	0	0	2
RCP 114	C-P Anatomy and Physiology	3	0	0	3
RCP 123	Special Practice Lab	0	3	0	1
RCP 145	RCP Clinical Practice II	0	0	15	5
		9	**6**	**15**	**16**
SUMMER - 1st Year					
RCP 112	Patient Management	3	3	0	4
RCP 115	C-P Pathophysiology	2	0	0	2
RCP 153	RCP Clinical Practice III	0	0	9	3
RCP 214	Neo/Ped's RC	1	3	0	2
		6	**6**	**9**	**11**

		Cl	Lb	Cn	Cr
FALL - 2nd Year					
PSY 150	General Psychology	3	0	0	3
RCP 210	Critical Care Concepts	3	3	0	4
RCP 222	Special Practice Lab	0	2	0	1
RCP 236	RCP Clinical Practice IV	0	0	18	6
---- ----	Humanities Requirement*	3	0	0	3
		9	**5**	**18**	**17**
SPRING - 2nd Year					
ENG 114	Professional Research and Reporting	3	0	0	3
RCP 211	Adv Monitoring/ Procedures	3	3	0	4
RCP 215	Career Prep - Adv Level	0	3	0	1
RCP 247	RCP Clinical Practice V	0	0	21	7
		6	**6**	**21**	**15**

*HUMANITIES REQUIREMENT
Choose one of the following:
ART 111 Art Appreciation
MUS 110 Music Appreciation
PHI 215 Philosophical Issues
PHI 240 Intro to Ethics
SPA 111 Elementary Spanish I

Forsyth Tech Respiratory Care Technology applicants MUST complete 1 unit each of high school algebra, biology, and chemistry prior to admission to the program.

TOTAL CREDIT HOURS: 74

SPEECH/LANGUAGE PATHOLOGY ASSISTANT A 45 73 0

CURRICULUM DESCRIPTION

The Speech-Language Pathology Assistant curriculum prepares graduates to work under the supervision of a licensed Speech-Language Pathologist, who evaluates, and treats individuals with various communication disorders.

Courses provide instruction in methods of screening for speech, language, and hearing disorders and in following written protocols designed to remediate individual communication problems. Supervised field experiences include working with patients of various ages and with various disorders.

Graduates may be eligible for registration with the North Carolina Board of Examiners of Speech-Language Pathologists and Audiologists and must be supervised by a licensed Speech-Language Pathologist. They may be employed in healthcare or education settings.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cn	Cr
		Hours Per Week			

FALL - 1st Year

BIO	163	Basic Anatomy and Physiology	4	2	0	5
ENG	115	Oral Communications	3	0	0	3
PSY	150	General Psychology	3	0	0	3
MAT	115	Mathematical Models	2	2	0	3
CIS	110	Intro to Computers	2	2	0	3
			14	**6**	**0**	**17**

SPRING - 1st Year

ENG	111	Expository Writing	3	0	0	3
PSY	241	Developmental Psychology	3	0	0	3
SLP	111	Intro to Speech-Language Path	3	0	0	3
SLP	112	SLP Anatomy and Physiology	3	0	0	3
----	----	Humanities Requirement*	3	0	0	3
			15	**0**	**0**	**15**

SUMMER - 1st Year

PSY	255	Intro to Exceptionality	3	0	0	3
SLP	130	Phonetics/Speech Patterns	2	2	0	3
SLP	140	Normal Communication	3	0	0	3
			8	**2**	**0**	**9**

FALL - 2nd Year

PSY	265	Behavioral Modification	3	0	0	3
SLP	120	SLP Admin Office Pro	2	0	0	2
SLP	211	Disorders and Treatment I	3	2	0	4
SLP	220	Assistive Technology	1	2	0	2
ENG	114	Professional Research and Reporting	3	0	0	3
			12	**4**	**0**	**14**

SPRING - 2nd Year

SLP	212	Disorders and Treatment II	3	2	3	5
SLP	230	SLP Fieldwork	0	0	12	4
SLP	231	SLP Fieldwork Seminar	3	0	0	3
			6	**2**	**15**	**12**

*HUMANITIES REQUIREMENT
Choose one of the following:

ART	111	Art Appreciation
MUS	110	Music Appreciation
PHI	215	Philosophical Issues
PHI	240	Intro to Ethics
SPA	111	Elementary Spanish

TOTAL CREDIT HOURS: 67
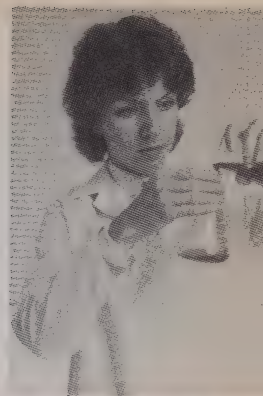
College Transfer Curriculums

COLLEGE TRANSFER

CURRICULUM DESCRIPTION

The College Transfer curriculum is designed to offer students an opportunity to take the first two years of a liberal arts college curriculum. The course work includes literature, humanities, mathematics, physical education and the sciences. Students who maintain a grade average of C or better should be able to transfer these credits to a senior college or university and complete a bachelor's degree.

COLLEGE TRANSFER - ASSOCIATE IN ARTS A 10 10 0

CURRICULUM DESCRIPTION

The College Transfer curriculum is designed to offer students an opportunity to take the first two years of a liberal arts college curriculum. The course work includes composition and literature, humanities, mathematics, physical education and the sciences. Students who maintain a grade average of C or better should be able to transfer these credits to a senior college or university and complete a bachelor's degree. The Associate in Arts curriculum concentrates heavily on the humanities and social sciences and is recommended for those who plan to continue in a bachelor of arts degree program at a senior college.

CURRICULUM COURSES

Course Title	Cl	Lb	Cr
Hours Per Week			

GENERAL EDUCATION CORE 44
(See 1 through 5 below)

1. English 6

		Cl	Lb	Cr
ENG 111	Expository Writing (required)	3	0	3
ENG 112	Argument-Based Research	3	0	3
OR				
ENG 113	Lit.-Based Research	3	0	3

2. Humanities/Fine Arts 12
Select 4 courses from at least 3 disciplines.
At least 1 literature course required.

		Cl	Lb	Cr
ART 111	Art Appreciation	3	0	3
MUS 110	Music Appreciation	3	0	3
PHI 215	Philosophical Issues	3	0	3
PHI 240	Introduction to Ethics	3	0	3
SPA 111	Elementary Spanish I	4	0	4
SPA 112	Elementary Spanish II	4	0	4
ENG 115	Oral Communication	3	0	3
ENG 231	American Literature I	3	0	3
ENG 232	American Literature II	3	0	3
ENG 241	British Literature I	3	0	3
ENG 242	British Literature II	3	0	3
ENG 262	World Literature II	3	0	3
ENG 273	African-Amer. Lit.	3	0	3

3. Social/Behavioral Sciences 12
Select 4 courses from at least 3 disciplines.
At least 1 history course required.

		Cl	Lb	Cr
ECO 251	Prin. of Microeconomics	3	0	3
ECO 252	Prin. of Macroeconomics	3	0	3
PSY 150	General Psychology	3	0	3
PSY 281	Abnormal Psychology	3	0	3
SOC 210	Intro. to Sociology	3	0	3
HIS 121	Western Civilization I	3	0	3
HIS 122	Western Civilization II	3	0	3
HIS 131	American History I	3	0	3
HIS 132	American History II	3	0	3
POL 120	American Government	3	0	3

4. Natural Sciences 8
Select 2 courses from the list below.

		Cl	Lb	Cr
AST 11	Descriptive Astronomy	3	0	3
AST 111A	Desc. Astronomy Lab	0	2	1
BIO 111	General Biology I	3	3	4
BIO 112	General Biology II	3	3	4
CHM 151	General Chemistry I	3	3	4
CHM 152	General Chemistry II	3	3	4
PHY 151	College Physics I	3	2	4
PHY 152	College Physics II	3	2	4
PHY 251	General Physics I	4	3	5
PHY 252	General Physics II	3	3	4

5. Mathematics 6
Select at least 1 course from list A
(introductory mathematics). The other unit
may be selected from list B.
Mathematics (A)

		Cl	Lb	Cr
MAT 140	Survey of Mathematics	3	0	3
MAT 161	College Algebra	3	0	3
MAT 162	College Trigonometry	3	0	3
MAT 165	Finite Mathematics	3	0	3
MAT 171	Precalculus Algebra	3	0	3
MAT 171A	Precalculus Algebra Lab	0	2	1
MAT 172	Precalculus Trig.	3	0	3
MAT 172A	Precalculus Trig. Lab	0	2	1
MAT 175	Precalculus	4	0	4
MAT 175A	Precalculus Lab	0	2	1
MAT 263	Brief Calculus	3	0	3

Mathematics (B)

		Cl	Lb	Cr
CIS 110	Intro. to Computers	2	2	3
CIS 115	Intro. to Prog and Logic	2	2	3
MAT 155	Statistical Analysis	3	0	3
MAT 155A	Statistics I Lab	0	2	1

OTHER REQUIRED HOURS 20-21
Select any general education and professional
courses approved for College Transfer. Must
include:

		Cl	Lb	Cr
ACA 115	Success and Study Skills	0	2	1
PED 110	Fitness for Life	1	2	2
AND				

One additional PED course from the following
list:

		Cl	Lb	Cr
PED 113	Aerobics I	0	3	1
PED 117	Weight Training I	0	3	1
PED 118	Weight Training II	0	3	1
PED 127	Karate	0	3	1
PED 128	Golf - Beginning	0	2	1
PED 130	Tennis - Beginning	0	2	1
PED 132	Racquetball - Beginning	0	2	1
PED 139	Bowling - Beginning	0	2	1
PED 140	Volleyball - Beginning			
PED 143	Volleyball - Intermediate	0	2	1
PED 144	Volleyball - Intermediate	0	2	1
PED 145	Basketball - Beginning	0	2	1
PED 146	Basketball - Intermediate	0	2	1
PED 152	Swimming - Beginning	0	2	1
PED 200	Advanced PE Skills	0	2	1

TOTAL CREDIT HOURS: 64-65

CURRICULUM DESCRIPTION

The College Transfer curriculum is designed to offer students an opportunity to take the first two years of a liberal arts college curriculum. The course work includes composition and literature, humanities, mathematics, physical education and the sciences. Students who maintain a grade average of C or better should be able to transfer these credits to a senior college or university and complete a bachelor's degree. The Associate in Science curriculum concentrates on mathematics and the physical and life sciences and is intended for those pursuing a bachelor of science degree at a senior college.

CURRICULUM COURSES

Course Title	Hours Per Week		
	Cl	Lb	Cr

GENERAL EDUCATION CORE 44
(See 1 through 5 below)

1. English 6

			Cl	Lb	Cr
ENG 111	Expository Writing (required)		3	0	3
ENG 112	Argument-Based Research		3	0	3
	OR				
ENG 113	Lit.-Based Research		3	0	3

2. Humanities/Fine Arts 12
Select 4 courses from at least 3 disciplines.
At least 1 literature course required.

		Cl	Lb	Cr
ART 111	Art Appreciation	3	0	3
MUS 110	Music Appreciation	3	0	3
PHI 215	Philosophical Issues	3	0	3
PHI 240	Introduction to Ethics	3	0	3
SPA 111	Elementary Spanish I	4	0	4
SPA 112	Elementary Spanish II	4	0	4
ENG 115	Oral Communication	3	0	3
ENG 231	American Literature I	3	0	3
ENG 232	American Literature II	3	0	3
ENG 241	British Literature I	3	0	3
ENG 242	British Literature II	3	0	3
ENG 262	World Literature II	3	0	3
ENG 273	African-Amer. Lit.	3	0	3

3. Social/Behavioral Sciences 12
Select 4 courses from at least 3 disciplines.
At least 1 history course required.

		Cl	Lb	Cr
ECO 251	Prin. of Microeconomics	3	0	3
ECO 252	Prin. of Macroeconomics	3	0	3
PSY 150	General Psychology	3	0	3
PSY 281	Abnormal Psychology	3	0	3
SOC 210	Intro. to Sociology	3	0	3
HIS 121	Western Civilization I	3	0	3
HIS 122	Western Civilization II	3	0	3
HIS 131	American History I	3	0	3
HIS 132	American History II	3	0	3
POL 120	American Government	3	0	3

4. Natural Sciences 8
Select 2 courses from the list below.

		Cl	Lb	Cr
AST 111	Descriptive Astronomy	3	0	3
AST 111A	Desc. Astronomy Lab	0	2	1
BIO 111	General Biology I	3	3	4
BIO 112	General Biology II	3	3	4
CHM 151	General Chemistry I	3	3	4
CHM 152	General Chemistry II	3	3	4
PHY 151	College Physics I	3	2	4
PHY 152	College Physics II	3	2	4
PHY 251	General Physics I	4	3	5
PHY 252	General Physics II	3	3	4

5. Mathematics 6
Select at least 1 course from list A
(introductory mathematics). The other unit
may be selected from list B.

Mathematics (A)

		Cl	Lb	Cr
MAT 140	Survey of Mathematics	3	0	3
MAT 161	College Algebra	3	0	3
MAT 162	College Trigonometry	3	0	3
MAT 165	Finite Mathematics	3	0	3
MAT 171	Precalculus Algebra	3	0	3
MAT 171A	Precalculus Algebra Lab	0	2	1
MAT 172	Precalculus Trig.	3	0	3
MAT 172A	Precalculus Trig. Lab	0	2	1
MAT 175	Precalculus	4	0	4
MAT 175A	Precalculus Lab	0	2	1
MAT 263	Brief Calculus	3	0	3
MAT 285	Differential Equations	3	0	3

Mathematics (B)

		Cl	Lb	Cr
CIS 110	Intro. to Computers	2	2	3
CIS 115	Intro. to Prog and Logic	2	2	3
MAT 155	Statistical Analysis	3	0	3
MAT 155A	Statistics I Lab	0	2	1

OTHER REQUIRED HOURS 20-21
Minimum of 14 credit hours in mathematics and/or
science and professional courses which have been
approved for transfer. Also must include:

		Cl	Lb	Cr
ACA 115	Success and Study Skills	0	2	1
PED 110	Fitness for Life	1	2	2
	AND			

One additional PED course from the following
list:

		Cl	Lb	Cr
PED 113	Aerobics I	0	3	1
PED 117	Weight Training I	0	3	1
PED 118	Weight Training II	0	3	1
PED 127	Karate	0	3	1
PED 128	Golf - Beginning	0	2	1
PED 130	Tennis - Beginning	0	2	1
PED 132	Racquetball - Beginning	0	2	1
PED 139	Bowling - Beginning	0	2	1
PED 140	Volleyball - Beginning	0	2	1
PED 143	Volleyball - Intermediate	0	2	1
PED 144	Volleyball - Intermediate	0	2	1
PED 145	Basketball - Beginning	0	2	1
PED 146	Basketball - Intermediate	0	2	1
PED 152	Swimming - Beginning	0	2	1
PED 200	Advanced PE Skills	0	2	1

TOTAL CREDIT HOURS: 64-65

Diploma
Curriculums
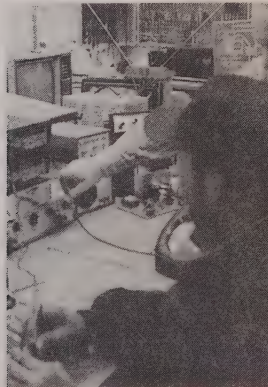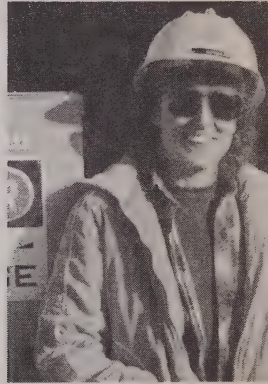
DIPLOMA CURRICULUMS

CURRICULUM DESCRIPTION

The diploma curriculums are practical in nature and are designed to prepare the student for immediate employment opportunities in a skilled trade. All curriculums are designed for one year or four consecutive quarters of intensive study. (Evening curriculums require approximately two years.) Upon completion of a curriculum, the graduate will be awarded the State Vocational Diploma. The vocational courses, forming each diploma curriculum, are not designed for transfer to associate's (or higher) degree levels of instruction.

SAMPLE COURSE LISTING

	Cl	Lb	Cr
AHR 1101 Intro to Refrigeration	2	6	5
	2	6	5

KEY TO SAMPLE COURSE LISTING

ARH . . . . .Course Prefix

110 . . . . .Course Number

Intro to Refrigeration . . . . .Course Title

Cl
2 . . .Number of Classroom Hours Per Week

Lb
6 . . .Number of Laboratory Hours Per Week

Cr
5 . . . . . . .Number of Semester Hours Credit

2 6 5 . . . . .Total Number of
Contact Hours Per Week

ACCOUNTING D 25 10 0

CURRICULUM DESCRIPTION

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	Cl	Lb	Cr

FALL

		Cl	Lb	Cr
ACC 120	Principles of Accounting I	3	2	4
BUS 115	Business Law I	3	0	3
CIS 111	Basic PC Literacy	1	2	2
ENG 111	Expository Writing	3	0	3
OST 131	Keyboarding	1	2	2
		11	6	14

SPRING

		Cl	Lb	Cr
ACC 121	Principles of Accounting II	3	2	4
ACC 129	Individual Income Taxes	2	2	3
BUS 116	Business Law II	3	0	3
MAT 115	Mathematical Models	2	2	3
		10	6	13

SUMMER

		Cl	Lb	Cr
ACC 220	Intermediate Accounting I	3	2	4
ACC 130	Business Income Taxes	2	2	3
CIS 120	Spreadsheet I	2	2	3
		7	6	10

TOTAL CREDIT HOURS: 37

ACCOUNTING D 25 10 0
Evening Curriculum

CURRICULUM DESCRIPTION

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
FALL - 1st Year			
ACC 120 Principles of Accounting I	3	2	4
ENG 111 Expository Writing	3	0	3
	6	2	7
SPRING - 1st Year			
ACC 121 Principles of Accounting II	3	2	4
ACC 129 Individual Income Taxes	2	2	3
	5	4	7
SUMMER - 1st Year			
OST 131 Keyboarding	1	2	2
ACC 130 Business Income Taxes	2	2	3
	3	4	5
FALL - 2nd Year			
CIS 111 Basic PC Literacy	1	2	2
MAT 115 Mathematical Models	2	2	3
	3	4	5
SPRING - 2nd Year			
BUS 115 Business Law I	3	0	3
CIS 120 Spreadsheet I	2	2	3
	5	2	6
SUMMER - 2nd Year			
BUS 116 Business Law II	3	0	3
ACC 220 Intermediate Accounting I	3	2	4
	6	2	7

TOTAL CREDIT HOURS: 37

AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY D 35 10 0

CURRICULUM DESCRIPTION

The Air Conditioning, Heating, and Refrigeration Technology curriculum, provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the A.A.S. degree covers residential building codes, residential system sizing, and advanced comfort systems.*

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. A.A.S. degree graduates should be able to demonstrate an understanding of system selection and balance, and advanced systems.*

*Forsyth Tech offers this curriculum at the **diploma level only**.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL				
AHR 110	Intro to Refrigeration	2	6	5
AHR 111	HVACR Electricity	2	2	3
AHR 112	Heating Technology	2	4	4
MAT 101	Applied Mathematics I	2	2	3
PHY 102	Fund. of Physics II	3	2	4
		11	**16**	**19**
SPRING				
AHR 113	Comfort Cooling Systems	2	4	4
AHR 114	Heat Pump Technology	2	4	4
AHR 130	HVAC Controls	2	2	3
ENG 101	Applied Communications I	3	0	3
WLD 112	Basic Welding Processes	1	3	2
		10	**13**	**16**
SUMMER				
AHR 160	Refrigerant Certification	1	0	1
AHR 212	Advanced Comfort Systems	2	6	4
AHR 250	HVAC Systems Diagnostics	0	4	2
ELC 128	Intro to PLC	2	3	3
		5	**13**	**10**

TOTAL CREDIT HOURS: 45

AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY D 35 10 0 Evening Curriculum

CURRICULUM DESCRIPTION

The Air Conditioning, Heating, and Refrigeration Technology curriculum, provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the A.A.S. degree covers residential building codes, residential system sizing, and advanced comfort systems.*

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. A.A.S. degree graduates should be able to demonstrate an understanding of system selection and balance, and advanced systems.*

*Forsyth Tech offers this curriculum at the **diploma level only**.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	CL	Lb	Cr
FALL - 1st Year			
AHR 110 Intro to Refrigeration	2	6	5
AHR 111 HVACR Electricity	2	2	3
MAT 101 Applied Mathematics I	2	2	3
	6	10	11
SPRING - 1st Year			
AHR 112 Heating Technology	2	4	4
AHR 113 Comfort Cooling Systems	2	4	4
PHY 102 Fund of Physics II	3	2	4
	7	10	12
SUMMER - 1st Year			
AHR 114 Heat Pump Technology	2	4	4
AHR 130 HVAC Controls	2	2	3
ENG 101 Applied Communications I	3	0	3
	7	6	10
FALL - 2nd Year			
AHR 212 Advanced Comfort Systems	2	6	4
AHR 250 HVAC Systems Diagnostics	0	4	2
	2	10	6
SPRING - 2nd Year			
AHR 160 Refrigerant Certification	1	0	1
ELC 128 Intro to PLC	2	3	3
WLD 112 Basic Welding Processes	1	3	2
	4	6	6

TOTAL CREDIT HOURS: 45

AUTOBODY REPAIR D 60 10 0

CURRICULUM DESCRIPTION

The Autobody Repair curriculum provides training in the use of equipment and materials of the autobody repair trade. The student studies the construction of the automobile body and techniques of autobody repairing, rebuilding, and refinishing.

The course work includes autobody fundamentals, industry overview, and safety. Students will perform hands-on repairs in the areas of non-structural and structural repairs, mig welding, plastics and adhesives, refinishing, and other related areas.

Graduates of the curriculum should qualify for entry-level employment opportunities in the automotive body and refinishing industry. Graduates may find employment with franchised independent garages, or they may become self-employed.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL				
AUB 111	Painting & Refinishing I	2	6	4
AUB 121	Non Structural Damage I	1	4	3
AUB 131	Structural Damage I	2	4	4
AUB 134	Auto Body MIG Welding	1	4	3
AUB 136	Plastics & Adhesives	1	4	3
AUB 160	Body Shop Operations	1	0	1
MAT 101	Applied Mathematics I	2	2	3
		10	**24**	**21**
SPRING				
AUB 112	Painting & Refinishing II	2	6	4
AUB 122	Non Structural Damage II	2	6	4
AUB 132	Structural Damage II	2	6	4
CIS 111	Basic PC Literacy	1	2	2
		7	**20**	**14**
SUMMER				
AUB 150	Automotive Detailing	1	3	2
AUB 114	Special Finishes	1	2	2
AUB 162	Auto Body Estimating	1	2	2
ENG 101	Applied Communications I	3	0	3
		6	**7**	**9**

TOTAL CREDIT HOURS: 44

AUTOMOTIVE SYSTEMS TECHNOLOGY D 60 16 0

CURRICULUM DESCRIPTION

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL				
AUT 110	Intro to Auto Technology	2	2	3
AUT 141	Suspension and Steering			
	Systems	2	4	4
AUT 151	Brake Systems	2	2	3
AUT 164	Automotive Electronics	2	2	3
MAT 101	Applied Mathematics I	2	2	3
		10	**12**	**16**
SPRING				
AUT 115	Engine Fundamentals	2	3	3
AUT 116	Engine Repair	1	3	2
AUT 181	Engine Perform.- Electrical	2	3	3
AUT 183	Engine Perform.-Fuel	2	3	3
		7	**12**	**11**
SUMMER				
AUT 161	Electrical Systems	2	6	4
AUT 171	Heating and Air Cond.	2	3	3
ENG 101	Applied Communications I	3	0	3
		7	**9**	**10**

TOTAL CREDIT HOURS: 37

AUTOMOTIVE SYSTEMS TECHNOLOGY D 60 16 0
Evening Curriculum

CURRICULUM DESCRIPTION

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

CURRICULUM BY SEMESTERS

Course Title		CL	Lb	Cr
FALL - 1st Year				
AUT 110	Intro to Auto Technology	2	2	3
AUT 151	Brake Systems	2	2	3
		4	**4**	**6**
SPRING - 1st Year				
AUT 141	Suspension and Steering Systems	2	4	4
AUT 164	Automotive Electronics	2	2	3
MAT 101	Applied Mathematics I	3	0	3
		7	**6**	**10**
SUMMER - 1st Year				
AUT 115	Engine Fundamentals	2	3	3
AUT 116	Engine Repair	1	3	2
		3	**6**	**5**
FALL - 2nd Year				
AUT 171	Heating and Air Conditioning	2	3	3
AUT 181	Engine Performance - Electrical	2	3	3
ENG 101	Applied Communications I	3	0	3
		7	**6**	**9**
SPRING - 2nd Year				
AUT 161	Electrical Systems	2	6	4
AUT 183	Engine Performance - Fuel	2	3	3
		4	**9**	**7**

Hours Per Week

TOTAL CREDIT HOURS: 37

CARPENTRY D 35 18 0

CURRICULUM DESCRIPTION

The Carpentry curriculum is designed to train students to construct residential structures using standard building materials and hand and power tools. Carpentry skills and a general knowledge of residential construction will also be taught.

Course work includes footings and foundations, framing, interior and exterior trim, cabinetry, blueprint reading, residential planning and estimating, and other related topics. Students will develop skills through hands-on participation.

Graduates should qualify for employment in the residential building construction field as rough carpenters, framing carpenters, roofers, maintenance carpenters, and other related job titles.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL				
BPR 130	Blueprint Reading/Const.	1	2	2
CAR 111	Carpentry I	4	15	9
CAR 114	Residential Building Codes	3	0	3
MAT 101	Applied Mathematics I	2	2	3
		10	**19**	**17**
SPRING				
CAR 112	Carpentry II	4	15	9
CAR 115	Res. Planning/Estimating	3	0	3
DFT 119	Basic CAD	1	2	2
		8	**17**	**14**
SUMMER				
CAR 113	Carpentry	3	9	6
ENG 101	Applied Communications I	3	0	3
		6	**9**	**9**

TOTAL CREDIT HOURS: 40

ELECTRICAL/ELECTRONICS TECHNOLOGY D 35 22 0

CURRICULUM DESCRIPTION

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical/electronic systems.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL				
BPR 130	Blueprint Reading/Const	1	2	2
ELC 112	DC/AC Electricity	3	6	5
ELC 113	Basic Wiring I	2	6	4
MAT 101	Applied Mathematics I	2	2	3
		8	**16**	**14**
SPRING				
ELC 114	Basic Wiring II	2	6	4
ELC 117	Motors and Controls	2	6	4
ELC 118	National Electrical Code	1	2	2
ENG 101	Applied Communications I	3	0	3
		8	**14**	**13**
SUMMER				
CIS 111	Basic PC Literacy	1	2	2
DFT 119	Basic CAD	1	2	2
ELC 115	Industrial Wiring	2	6	4
ELN 229	Industrial Electronics	2	4	4
		6	**14**	**12**

TOTAL CREDIT HOURS: 39

CURRICULUM DESCRIPTION

The Electronic Servicing Technology curriculum is designed to provide basic knowledge and skills required in the installation, maintenance, and servicing of electronic components and systems. Men and women will gain entry level skills necessary for success in an ever changing high-technology world.

Students will learn to install, maintain, and service components in both consumer and industrial electronic fields. This includes but is not limited to radios, television, audio/video equipment, digital and microprocessor controlled systems, computers, and monitors.

Graduates should qualify for employment in a wide variety of businesses and industries that require electronic servicing technicians. Opportunities exist in areas such as consumer electronic repairs, business systems, and industrial electronic servicing.

CURRICULUM BY SEMESTERS

Course Title		CL	Lb	Cr
FALL				
ELC 140	Fund. of DC/AC Circuits	5	6	7
ELN 141	Digital Fundamentals	4	6	6
MAT 101	Applied Mathematics I	2	2	3
		11	**14**	**16**
SPRING				
ELN 140	SemiConductor Devices	4	6	6
ELN 241	Consumer Electronics	4	6	6
ELN 243	Communication Electronics	2	3	3
PHY 102	Fundamentals of Physics II	3	2	4
		13	**17**	**19**
SUMMER				
ELN 142	Video Systems	7	9	10
ENG 101	Applied Communications I	3	0	3
		10	**9**	**13**

Hours Per Week

TOTAL CREDIT HOURS: 48

FUNERAL SERVICE EDUCATION D 55 26 0

This academic program is designed to meet specific North Carolina state needs. It is not accredited by the American Board of Funeral Service Education. Students graduating from this curriculum are not eligible to take the National Board Examination, nor any state board examination for which graduation from an ABFSE accredited program is required.

This is a consortium curriculum offered to students at Forsyth Technical Community College through an agreement with Fayetteville Technical Community College. For additional information about the N.C. Funeral Director Certificate Curriculum, call (901) 723-0371, Ext. 7253.

DESCRIPTION

The Funeral Service Education curriculum provides students with the opportunity to become proficient in basic funeral service skills.

In addition to the general education courses offered in the curriculum, technical courses such as human anatomy, embalming theory and practice, embalming chemistry, restorative arts, funeral law, and funeral home operations are taught.

Graduates of the curriculum, upon passing the state or national exam and completing an internship in a funeral home, will be qualified for employment as embalmers and/or funeral directors.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cr
FALL - 1st Year				
BUS 110	Introduction to Business	3	0	3
ENG 115	Oral Communication	3	0	3
FSE 112	Principles of Funeral Service	3	0	3
FSE 214	Pathology	3	0	3
PSY 150	General Psychology	3	0	3
SOC 210	Introduction to Sociology	3	0	3
		18	**0**	**18**
SPRING - 1st Year				
ACC 170	Technical Accounting	2	3	3
BUS 115	Business Law I	3	0	3
BUS 230	Small Business Management	3	0	3
CIS 111	Basic PC Literacy	1	2	2
FSE 116	Funeral Law and Ethics	3	0	3
FSE 215	Funeral Home Operations	4	0	4
PSY 141	Psych of Death and Dying	3	0	3
		19	**5**	**21**

Courses with an FSE prefix will be taught over the Information Highway from Fayetteville Technical Community College. All courses may be taken on the Forsyth Tech campus.

Funeral Service Education applicants MUST complete 2 units of high school algebra and 1 unit of biology prior to admission to the program.

TOTAL CREDIT HOURS: 39

GENERAL OCCUPATIONAL TECHNOLOGY D 55 28 0

CURRICULUM DESCRIPTION

This curriculum provides individuals with an opportunity to upgrade their skills and to earn a diploma by taking courses suited for their occupational interests and/or needs.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of studies for each student will be selected from associate degree level courses offered by the College

Graduates will become more effective workers, be better qualified for advancements within their field of employment or become qualified for a wide range of entry level employment opportunities.

CURRICULUM COURSES

Course Title	Hours Per Week		
	Cl	Lb	Cr

GENERAL EDUCATION 6
3 SHC must be in communications. The other 3 SHC may be in reading, writing, oral communications, fundamental mathematical skills, and basic use of computers.

Communications

		Cl	Lb	Cr
ENG 111	Expository Writing	3	0	3
ENG 115	Oral Communications	3	0	3

MAJOR HOURS 30

Core
18 SHC must be taken from the curriculum program subject/course core that the student is aspiring to complete.

Concentration
12 SHC must be taken from the curriculum program's subjects and/or courses. The majority of these hours must be unique to the concentration and are in addition to the required subject/course core.

OTHER REQUIRED HOURS 3
3 SHC of electives, orientation, or study skills.

TOTAL CREDIT HOURS: 39

GRAPHIC ARTS AND IMAGING TECHNOLOGY   D 30 18 0

CURRICULUM DESCRIPTION

The Graphic Arts and Imaging Technology curriculum is designed to provide students with knowledge and skills necessary for employment in the printing, publishing, packaging, and related industries.

Students will receive hands-on training in computer publishing, imaging technology, offset lithography, screen printing, and emerging printing technologies. Training may also include flexography, graphic design, and multimedia.

Graduates should qualify for career opportunities within the printing and publishing industries.

CURRICULUM BY SEMESTERS

Course Title	CL	Lb	Cr
FALL			
GRA 110 Graphic Arts Orientation	2	0	2
GRA 112 Graphic Arts Problem			
Solving	2	0	2
GRA 121 Graphic Arts I	2	4	4
GRA 151 Computer Graphics I	1	3	2
MAT 101 Applied Mathematics I	2	2	3
OST 131 Keyboarding	1	2	2
	10	11	15
SPRING			
ENG 101 Applied			
Communications I	3	0	3
GRD 141 Graphic Design I	2	4	4
GRA 152 Computer Graphics II	1	3	2
GRA 221 Graphic Arts II	2	4	4
GRA 255 Image Manipulation I	1	3	2
	9	14	15
SUMMER			
BUS 230 Small Business			
Management	3	0	3
GRA 256 Image Manipulation II	1	3	2
PRN 221 Offset Press Operations	1	4	3
PRN 240 Print Estimating/Planning	3	0	3
	8	7	11

TOTAL CREDIT HOURS: 41

INFORMATION SYSTEMS D 25 26 0

CURRICULUM DESCRIPTION

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
CIS 115	Intro. to Prog. and Logic	2	2	3
		3	14	5
SPRING - 1st Year				
CIS 130	Survey of Operating Systems	2	3	3
CSC 139	Visual BASIC Programming	2	3	3
		4	6	6
SUMMER - 1st Year				
CIS 152	Database Concepts and Apps.	2	2	3
CIS 215	Hardware Install./ Maintenance	2	3	3
		4	5	6
FALL - 2nd Year				
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab	0	2	1
MAT 115	Mathematical Models *OR*	2	2	3
MAT 161	College Algebra *AND*	(3)	(0)	(3)
MAT 161A	College Algebra Lab (1)	(0)	(0)	(2)
		5	4	7
		(6)	(4)	(8)
SPRING - 2nd Year				
NET 110	Data Comm./Networking	2	2	3
CIS 165	Desktop Publishing I	2	2	3
CIS ----	Elective	3	0	3
		7	4	9
SUMMER - 2nd Year				
CIS ----	Elective	4	0	4
		4	0	4

TOTAL HOURS: 37 or (38)

INFORMATION SYSTEMS D 25 26
Desktop Publishing Diploma

CURRICULUM DESCRIPTION

The Desktop Publishing diploma program is designed to provide students with the knowledge and skills necessary for producing single- and multi-page publications.

Students will learn to integrate a variety of software and to utilize hardware peripherals to incorporate text and images. The curriculum emphasizes design and layout as well as composing, formatting, editing, and proofreading.

Graduates should qualify for self-employment opportunities or employment with business, industry, or government organizations that use computers for desktop publishing.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week	
	Cl	Lb	Cr
FALL - 1st Year			
CIS 111 Basic PC Literacy	1	2	2
CIS 115 Intro. to Prog. and Logic	2	2	3
ENG 111 Expository Writing	3	0	3
ENG 111A Expository Writing Lab	0	2	1
MAT 115 Mathematical Models	2	2	3
OR			
MAT 161 College Algebra	(3)	(0)	(3)
AND			
MAT 161A College Algebra Lab	(0)	(2)	(1)
	8	**8**	**12**
	(9)	**(8)**	**(13)**
SPRING - 1st Year			
CIS 116 Intoduction PC App. Development	2	3	3
CIS 130 Survey of Operating Systems	2	3	3
CIS 164 DTP Layout and Design	2	2	3
CIS 165 Desktop Publishing I	2	2	3
	8	**10**	**12**
FALL - 2nd Year			
CIS 152 Database Concepts	2	2	3
CIS 162 MM Presentation Software	2	2	3
CIS 166 Desktop Publishing II	2	2	3
CIS 172 Introduction to the Internet	2	3	3
	8	**9**	**12**
SPRING - 2nd Year			
CIS 168 Desktop Presentations	1	2	2
CIS 260 Business Graphics App.	2	2	3
NET 110 Data Communications/ Networking	2	2	3
	5	**6**	**8**

TOTAL HOURS: 44 or (45)

INFORMATION SYSTEMS D 25 26
MultiMedia Diploma

CURRICULUM DESCRIPTION

The MultiMedia diploma program is designed to provide students with the knowledge and skills necessary for producing multimedia presentations.

Students will learn to integrate a variety of software and to utilize hardware peripherals for incorporating data, audio. and video in a presentation. The curriculum emphasizes design and layout as well as composing, formatting, editing, and proofreading.

Graduates should qualify for self-employment opportunities or employment with business, industry, or government organizations that use computers for multimedia presentations.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
CIS 115	Intro. to Prog. and Logic	2	2	3
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab	0	2	1
MAT 115	Mathematical Models *OR*	2	2	3
MAT 161	College Algebra *AND*	(3)	(0)	(3)
MAT 161A	College Algebra Lab	(0)	(2)	(1)
		8	**8**	**12**
		(9)	**(8)**	**(13)**
SPRING - 1st Year				
CIS 130	Survey of Operating Systems	2	3	3
CIS 160	MM Resources Integration	2	2	3
CIS 162	MM Presentation Software	2	2	3
CSC 139	Visual Basic Programming	2	3	3
		8	**10**	**12**
FALL - 2nd Year				
CIS 152	Database Concepts	2	2	3
CIS 172	Intro. to the Internet	2	3	3
CIS 261	Programming for MM	2	2	3
CIS 266	Multimedia Design	2	2	3
		8	**9**	**12**
SPRING - 2nd Year				
CIS 262	Adv. Programming MM	2	2	3
CIS 268	Multimedia Project	2	2	3
NET 110	Data Communications/ Networking	2	2	3
		6	**6**	**9**

TOTAL HOURS: 45 or (46)

INFORMATION SYSTEMS D 25 26 D
Networking Administration and Support Concentration
LAN Technology

CURRICULUM DESCRIPTION

Network Administration and Support is a concentration under the curriculum title of Information Systems. This curriculum prepares students to install and support networks and develops strong analytical skills and extensive computer knowledge.

Course work includes extensive hands-on experience with networks. Classes cover media types, topologies, and protocols with installation and support of hardware and software, troubleshooting network and computer problems, and administrative responsibilities. Elective choices provide opportunity for specialization individualization.

Graduates should qualify for positions such as: LAN/PC, Administrator, Microcomputer Support Specialist, Network Control Operator, Communications Technician/Analyst, Network/Computer Consultant, and Information Systems Specialist. Graduates are also prepared to sit for certification exams which can result in industry-recognized credentials.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cr

FALL - 1st Year

		Cl	Lb	Cr
CIS 111	Basic PC Literacy	1	2	2
CIS 130	Survey of Operating Systems	2	2	3
CIS 173	Network Theory	2	2	3
		5	6	8

SPRING - 1st Year

		Cl	Lb	Cr
CIS 174	Network System Manager I	2	2	3
CIS 282	Network Tech.	3	0	3
MAT 115	Math. Models	2	2	3
		7	4	9

SUMMER - 1st Year

		Cl	Lb	Cr
CIS 274	Network System Manager II	2	2	3
NET 110	Data Comm./ Networking	2	2	3
		4	4	6

FALL - 2nd Year

		Cl	Lb	Cr
CIS 215	Hardware Install/ Maintenance	2	3	4
CIS 287	Network Support	2	2	3
		4	5	7

SPRING - 2nd Year

		Cl	Lb	Cr
BUS 151	People Skills	3	0	3
ENG 111	Expository Writing	3	0	3
		6	0	6

TOTAL HOURS: 36

INFORMATION SYSTEMS D 25 26 D
Networking Administration and Support Concentration
WAN Technology

CURRICULUM DESCRIPTION

Network Administration and Support is a concentration under the curriculum title of Information Systems. This curriculum prepares students to install and support networks and develops strong analytical skills and extensive computer knowledge.

Course work includes extensive hands-on experience with networks. Classes cover media types, topologies, and protocols with installation and support of hardware and software, troubleshooting network and computer problems, and administrative responsibilities. Elective choices provide opportunity for specialization individualization.

Graduates should qualify for positions such as: LAN/PC, Administrator, Microcomputer Support Specialist, Network Control Operator, Communications Technician/Analyst, Network/Computer Consultant, and Information Systems Specialist. Graduates are also prepared to sit for certification exams which can result in industry-recognized credentials.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
CIS 130	Survey of Operating Systems	2	2	3
CIS 173	Network Theory	2	2	3
		5	**6**	**8**
SPRING - 1st Year				
CIS 282	Network Tech.	3	0	3
ENG 111	Expository Writing	3	0	3
MAT 115	Math. Models	2	2	3
		8	**2**	**9**
SUMMER - 1st Year				
CIS 215	Hardware Install/ Maintenance	2	3	4
NET 110	Data Comm./ Networking	2	2	3
		4	**5**	**7**
FALL - 2nd Year				
CIS 175	Network Mgmt. I	2	2	3
CIS 287	Network Support	2	2	3
		4	**4**	**6**
SPRING - 2nd Year				
BUS 151	People Skills	3	0	3
CIS 275	Network Mgmt. II	2	2	3
		5	**2**	**6**

TOTAL HOURS: 36

INFORMATION SYSTEMS D 25 26 E
Programming Concentration

CURRICULUM DESCRIPTION

Programming is a concentration under the curriculum title of Information Systems. This curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
CIS 115	Intro to Prog & Logic	2	2	3
CSC 139	Introduction to Visual Basic	2	3	3
		5	7	8
SPRING - 1st Year				
CIS 130	Survey of Operating Systems	2	3	3
CSC 135	COBOL Programming	2	3	3
MAT 115	Mathematical Models	3	0	3
		7	6	9
SUMMER - 1st Year				
CIS 152	Database Concepts and Apps	2	2	3
CIS 244	Operating Systems - AS/400	2	3	3
	OR			
CIS 246	Operating Systems - UNIX	2	3	3
ENG 115	Oral Communication	3	0	3
		7	5	9
FALL - 2nd Year				
CIS 286	Systems Analysis and Design	3	0	3
CSC 138	RPG Programming	2	3	3
ENG 111	Expository Writing	3	0	3
		8	3	9
SPRING - 2nd Year				
SEM 298	Seminar in Programming	2	3	3
		2	3	3

TOTAL CREDIT HOURS: 38

MACHINING TECHNOLOGY D 50 30 0

CURRICULUM DESCRIPTION

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations and make decisions to insure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies and in a wide range of specialty machining job shops.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	CL	Lb	Cr
FALL			
BPR 111 Blueprint Reading	1	2	2
ISC 112 Industrial Safety	2	0	2
ENG 115 Oral Communication	3	0	3
MAC 111 Machining Technology I	2	12	6
MAC 151 Machining Calculations	1	2	2
	9	16	15
SPRING			
BPR 121 Blueprint Reading: Mechanical	1	2	2
MAC 112 Machining Technology II	2	12	6
MAC 124 CNC Milling	1	3	2
MAT 120 Geometry and Trigonometry	2	2	3
MEC 145 Mfg. Materials and Processes	2	3	3
	8	22	16
SUMMER			
COE 110 World of Work	1	0	1
MAC 113 Machining Technology III	2	12	6
MAC 122 CNC Turning	1	3	2
	4	15	9

TOTAL CREDIT HOURS: 40

MACHINING TECHNOLOGY D 50 30 0
Evening Curriculum

CURRICULUM DESCRIPTION

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations and make decisions to insure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies and in a wide range of specialty machining job shops.

CURRICULUM BY SEMESTERS

Course Title		CL	Lb	Cr
Hours Per Week				

FALL - 1st Year

		CL	Lb	Cr
BPR 111	Blueprint Reading	1	2	2
ISC 112	Industrial Safety	2	0	2
MAC 111A	Machining Technology IA	1	6	3
MAC 151	Machining Calculations	1	2	2
		5	**10**	**9**

SPRING - 1st Year

		CL	Lb	Cr
BPR 121	Blueprint Reading: Mechanical	1	2	2
ENG 115	Oral Communication	3	0	3
MAC 111B	Machining Technology IB	1	6	3
MAT 120	Geometry and Trigonometry	2	2	3
		7	**10**	**11**

SUMMER - 1st Year

		CL	Lb	Cr
MAC 112A	Machining Technology IIA	1	6	3
MEC 145	MFG Materials and Processes	2	3	3
		3	**9**	**6**

FALL - 2nd Year

		CL	Lb	Cr
COE 110	World of Work	1	0	1
MAC 112B	Machining Technology IIB	1	6	3
MAC 124	CNC Milling	1	3	2
		3	**9**	**6**

SPRING - 2nd Year

		CL	Lb	Cr
MAC 113	Machining Technology III	2	12	6
MAC 122	CNC Turning	1	3	2
		3	**15**	**8**

TOTAL CREDIT HOURS: 40

MEDIUM/HEAVY DUTY VEHICLES SYSTEMS (DIESEL) TECHNOLOGY D 60 24 0

CURRICULUM DESCRIPTION

The Medium/Heavy Duty Vehicles Systems Technology curriculum is designed to prepare individuals with the knowledge and skills needed to service, troubleshoot, and repair medium and heavy duty vehicles.

The course work includes the purpose, construction features, and principles of operation of medium and heavy duty vehicles.

Graduates of the curriculum should qualify for entry level employment opportunities in a dealership, fleet shop, or independent garage as a technician. Graduates that have met the work experience requirement should also be prepared to take the ASE certification exam.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL				
CIS 111	Basic PC Literacy	1	2	2
DIE 110	Engines	3	9	6
DIE 125	Preventive Maintenance	1	3	2
DIE 230	Air Brakes	1	2	2
ELN 112	Diesel Electronic Systems	2	6	4
		8	**22**	**16**
SPRING				
DIE 112	Diesel Electrical Systems	3	6	5
DIE 115	Electronic Engines	2	3	3
DIE 119	Mechanical Transmissions	2	2	3
ENG 101	Applied Communications I	3	0	3
MAT 101	Applied Mathematics I	2	2	3
		12	**13**	**17**
SUMMER				
DIE 114	Power Trains	3	6	5
DIE 116	Air Conditioning/ Diesel Equipment	1	2	2
DIE 233	Suspension/Steering	2	4	4
HYD 112	Hydraulics/Medium/ Heavy Duty	1	2	2
		7	**14**	**13**

TOTAL CREDIT HOURS: 46

OFFICE SYSTEMS TECHNOLOGY D 25 36 0

CURRICULUM DESCRIPTION

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management. Graduates receive preparation to take the Certified Professional Secretary (CPS) exam.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
CIS 111	Basic PC Literacy	1	2	2
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab	0	2	1
OST 131	Keyboarding	1	2	2
		5	**6**	**8**
SPRING - 1st Year				
BUS 121	Business Math	2	2	3
CIS 152	Database Concepts and Apps.	2	2	3
OST 134	Text Entry and Formatting	3	2	4
OST 136	Word Processing	1	2	2
		8	**8**	**12**
SUMMER - 1st Year				
OST 135	Adv. Text Entry and Format	3	2	4
OST 164	Text Editing Applications	3	0	3
		6	**2**	**7**
FALL - 2nd Year				
OST 162	Executive Terminology	3	0	3
ENG 114	Prof. Research and Reporting	3	0	3
OST 236	Advanced Word/ Information Proc.	2	2	3
		8	**2**	**9**
SPRING - 2nd Year				
CIS 120	Spreadsheet I	2	2	3
ENG 115	Oral Communication	3	0	3
OST 289	Office Systems Management	2	2	3
		7	**4**	**9**

TOTAL CREDIT HOURS: 45

PLUMBING   D 35 30 0

CURRICULUM DESCRIPTION

The Plumbing curriculum is designed to give individuals the opportunity to acquire basic skills to assist with the installation and repairs of plumbing systems in residential and small buildings.

Course work includes sketching diagrams, interpretation of blueprints and practices in plumbing assembly. Students will gain knowledge of State Codes and requirements.

Graduates should qualify for employment at parts supply houses, maintenance companies, and plumbing contractors to assist with various plumbing applications.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
FALL			
BPR 130 Blueprint Reading/Const.	1	2	2
MAT 101 Applied Mathematics I	2	2	3
PLU 110 Modern Plumbing	4	15	9
PLU 140 Intro to Plumbing Codes	1	2	2
	8	21	16
SPRING			
DFT 119 Basic CAD	1	2	2
PLU 120 Plumbing Applications	4	15	9
PLU 150 Plumbing Diagrams	1	2	2
WLD 112 Basic Welding Processes	1	3	2
	7	22	15
SUMMER			
ENG 101 Applied Communications I	3	0	3
PLU 130 Plumbing Systems	3	9	6
	6	9	9

TOTAL CREDIT HOURS: 40

CURRICULUM DESCRIPTION

The Practical Nursing curriculum prepares individuals with the knowledge and skills to provide nursing care to children and adults.

Students will participate in assessment, planning, implementing, and evaluating nursing care.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cn	Cr
FALL					
ACA 111	College Student Success	1	0	0	1
BIO 163	Basic Anatomy and Physiology	4	2	0	5
NUR 101	Practical Nursing I	7	6	6	11
PSY 150	General Psychology	3	0	0	3
		15	**8**	**6**	**20**
SPRING					
ENG 111	Expository Writing	3	0	0	3
NUR 102	Practical Nursing II	8	0	12	12
		11	**0**	**12**	**15**
SUMMER					
NUR 103	Practical Nursing III	6	0	12	10
		6	**0**	**12**	**10**

Hours Per Week

Forsyth Tech Practical Nursing applicants MUST complete 1 unit each of high school algebra and chemistry prior to admission to the program. Biology is recommended prior to entry.

TOTAL CREDIT HOURS: 45

WELDING TECHNOLOGY D 50 42 0

CURRICULUM DESCRIPTION

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
FALL			
MAT 101 Applied Mathematics I	2	2	3
MEC 111 Machine Processes I	2	3	3
WLD 110 Cutting Processes	1	3	2
WLD 115 SMAW (Stick) Plate	2	9	5
	7	**17**	**13**
SPRING			
ENG 101 Applied Communications I	3	0	3
WLD 121 GMAW (Mig) FCAW/Plate	2	6	4
WLD 131 GTAW (Tig) Plate	2	6	4
WLD 143 Welding Metallurgy	1	2	2
	8	**14**	**13**
SUMMER			
WLD 116 SMAW (Stick) Plate/Pipe	1	9	4
WLD 141 Symbols & Specifications	2	2	3
WLD 145 Thermoplastic Welding	1	3	2
WLD 261 Certification Practices	1	3	2
	5	**17**	**11**

You may substitute ENG 111 and 111A for ENG 101. You may substitute MAT 115 for MAT 101.

TOTAL CREDIT HOURS: 37

WELDING TECHNOLOGY D 50 42 0
Evening Curriculum

CURRICULUM DESCRIPTION

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr

Hours Per Week

FALL - 1st Year

WLD 115 SMAW (Stick) Plate	2	9	5
	2	9	5

SPRING - 1st Year

MAT 101 Applied Mathematics I	2	2	3
MEC 111 Machine Processes I	2	3	3
WLD 110 Cutting Processes	1	3	2
	5	8	8

SUMMER - 1st Year

WLD 121 GMAW (MIG) FCNW/Plate	2	6	4
WLD 143 Welding Metallurgy	1	2	2
	3	8	6

FALL - 2nd Year

ENG 101 Applied Communications I	3	0	3
WLD 131 GTAW (TIG) Plate	2	6	4
	5	6	7

SPRING - 2nd Year

WLD 116 SMAW (Stick) Plate/Pipe	1	9	4
WLD 141 Symbols and Specifications	2	2	3
	3	11	7

SUMMER - 2nd Year

WLD 145 Thermoplastic Welding	1	3	2
WLD 261 Certification Practices	1	3	2
	2	6	4

You may substitute ENG 111 and 111A for ENG 101. You may substitute MAT 115 for MAT 101.

TOTAL CREDIT HOURS: 37
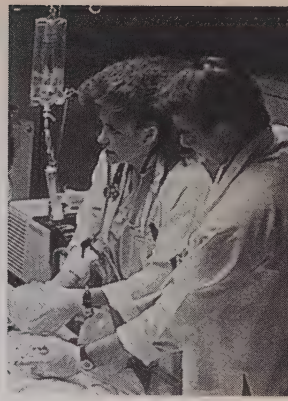
Technical Specialty
Diploma Curriculum
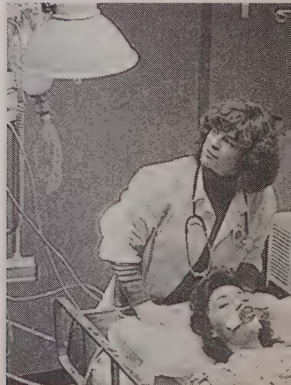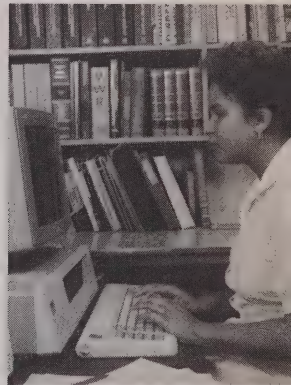
TECHNICAL SPECIALTY DIPLOMA CURRICULUMS

Certificate curriculums are especially designed educational plans of study drawn from existing curriculums for persons who desire to improve their job skills in a particular area of interest.

The programs are also designed to meet the needs of employers in upgrading the occupational skills of their employees. Each certificate program may be tailored toward the requirements of a specific business, industry, or organization.

SAMPLE COURSE LISTING

			Cl	Lb	Cn	Cr
CIT	209	CIT Topics	2	0	0	2
			2	0	0	2

KEY TO SAMPLE COURSE LISTING

CIT . . . . .Course Prefix

209 . . . . .Course Number

CIT Topics . . . . .Course Title

Cl
2 . . .Number of Classroom Hours Per Week

Lb
0 . . .Number of Laboratory Hours Per Week

Cn
0 . . . . .Number of Practicum Per Week
(Practical application or clinical experience per week)

Cr
2 . . . . . . .Number of Semester Hours Credit

$\overline{2}$ $\overline{0}$ $\overline{0}$ $\overline{2}$ . . . . .Total Number of Contact Hours Per Week

CARDIOVASCULAR/ VASCULAR INTERVENTIONAL TECHNOLOGY D 45 14 0

CURRICULUM DESCRIPTION

The Cardiovascular/Vascular Interventional Technology curriculum teaches students to use specialized equipment to visualize vascular structures and to assist physicians in diagnostic and interventional procedures. *Individuals entering this curriculum must be registered or registry eligible radiologic technologists by the ARRT.*

The technologist, through academic and clinical studies, is prepared to provide quality patient care and professional communication skills while performing scheduled and emergency angiographic studies utilizing sterile technique, advanced radiographic and specialty equipment, and radiation protection techniques.

Graduates of this program may be eligible to sit for the American Registry of Radiologic Technologists Advanced Level Examination in Cardiovascular Interventional Technology. Technologists may find employment in medical facilities where vascular, cardiovascular, and/or interventional imaging procedures are performed.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cn	Cr
FALL				
ACA 220 Professional Transition	1	0	0	1
CIT 211 Patient Care	3	0	0	3
CIT 212 Angio Equipment and Supplies	3	0	0	3
CIT 214 Vascular Imaging I	3	0	0	3
CIT 230 CIT Clinical Practicum I	0	0	21	7
	10	0	21	17
SPRING				
BIO 163 Basic Anat. and Physiology*	(4)	(2)	(0)	(5)
OR				
BIO 271 Pathophysiology	3	0	0	3
CIT 213 Radiographic Pharmacology	3	0	0	3
CIT 224 Vascular Imaging II	3	0	0	3
CIT 240 CIT Clinical Practicum II	0	0	21	7
	9	0	21	16
	(10)	(2)	(21)	(18)
SUMMER				
CIT 250 CIT Clinical Practicum III	0	0	24	8
CIT 260 CIT Topics	2	0	0	2
ENG 111 Expository Writing**				
OR				
ENG 114 Professional Research and Reporting	3	0	0	3
	5	0	24	13

* If a student has credit for BIO 163 at time of program entry, then BIO 271 will be required to meet the general education requirement.

** If a student has credit for ENG 111 at time of program entry, then ENG 114 will be required to meet the general education requirement.

TOTAL CREDIT HOURS: 46 (48)

COMPUTED TOMOGRAPHY AND MAGNETIC RESONANCE IMAGING TECHNOLOGY D 45 20 0

CURRICULUM DESCRIPTION

The Computed Tomography and Magnetic Resonance Imaging Technology curriculum, a specialty for radiographers, prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes. *Individuals entering this curriculum must be registered or registry eligible radiologic technologists by the ARRT.*

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced-Level testing in Computed Tomography and/or Magnetic Resonance Imaging examinations. They may find employment in facilities which perform these imaging procedures.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cn	Cr
SUMMER (FINAL HALF SEMESTER)				
CAT 210 CT Physics and Equipment	3	0	0	3
CAT 223 CT Clinical Practicum	0	0	9	3
	3	0	9	6
FALL				
CAT 211 CT Procedures	4	0	0	4
CAT 228 CT Clinical Practicum	0	0	24	8
ENG 111 Expository Writing*				
OR				
ENG 114 Professional Research and Reporting	3	0	0	3
	7	0	24	15
SPRING				
BIO 163 Basic Anat. and Physiology**	(4)	(2)	(0)	(5)
OR				
BIO 271 Pathophysiology	3	0	0	3
MRI 210 MRI Physics and Equipment	3	0	0	3
MRI 211 MRI Procedures	4	0	0	4
MRI 227 MRI Clinical Practicum	0	0	21	7
	10	0	21	17
	(11)	(2)	(21)	(19)
SUMMER (FIRST HALF SEMESTER)				
MRI 224 MRI Clinical Practicum	0	0	12	4
	0	0	12	4

* If a student has credit for ENG 111 at time of program entry, then ENG 114 will be required to meet the general education requirement.

** If a student has credit for BIO 163 at time of program entry, then BIO 271 will be required to meet the general education requirement.

TOTAL CREDIT HOURS: 42 (44)
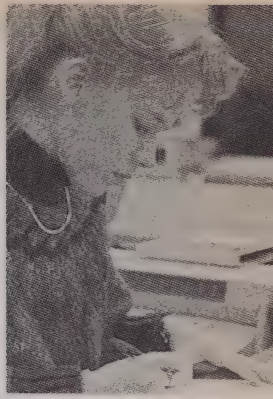
Certificate
Curriculums

CERTIFICATE CURRICULUMS

Certificate curriculums are especially designed educational plans of study drawn from existing curriculums for persons who desire to improve their job skills in a particular area of interest.

The programs are also designed to meet the needs of employers in upgrading the occupational skills of their employees. Each certificate program may be tailored toward the requirements of a specific business, industry, or organization.

SAMPLE COURSE LISTING

			Cl	Lb	Cn	Cr
BUS	102	Keyboarding	3	2	0	4
			3	2	0	4

KEY TO SAMPLE COURSE LISTING

BUS .... Course Prefix

102 .... Course Number

Keyboarding .... Course Title

Cl
3 .. .Number of Classroom Hours Per Week

Lb
2 .. .Number of Laboratory Hours Per Week

Cn
0 .... Number of Practicum Per Week
(Practical application or clinical experience per week)

Cr
4 ...... Number of Semester Hours Credit

‾3‾ ‾2‾ ‾0‾ ‾4‾ .... Total Number of Contact Hours Per Week

CERTIFICATE IN COMPUTED TOMOGRAPHY C 45 20 0

DESCRIPTION

The Computed Tomography certificate, a specialty for radiographers, prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes. *Individuals entering this curriculum must be registered or registry eligible radiologic technologists by the ARRT.*

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced-Level testing in Computed Tomography Imaging examinations. They may find employment in facilities which perform these imaging procedures.

CURRICULUM BY SEMESTERS

Course Title		Cl	Lb	Cn	Cr
SUMMER (Final Half Semester)					
CAT 210	CT Physics and Equipment	3	0	0	3
CAT 223	CT Clinical Practicum	0	0	9	3
		3	**0**	**9**	**6**
FALL					
CAT 211	CT Procedures	4	0	0	4
CAT 228	CT Clinical Practicum	0	0	24	8
		4	**0**	**24**	**12**

Hours Per Week

TOTAL CREDIT HOURS: 18

CERTIFICATE IN HEALTH CARE TECHNOLOGY C 45 35 0

DESCRIPTION

Individuals entering this curriculum must be listed on the Nursing Assistant I Registry and have documentation of successful completion of a Nursing Assistant I program. This curriculum prepares multi-skilled health care personnel to perform a variety of assistive skills which cross several traditional health care disciplines.

Course work includes communication, dietary, and clerical skills as well as those required for listing as a Nursing Assistant II. Based upon local needs, instruction may also include phlebotomy and basic electrocardiography, environmental maintenance, restorative care, and basic respiratory skills.

Graduates of this program will be eligible for listing as a Nursing Assistant II in the state of North Carolina. Employment opportunity sites include hospitals, nursing homes, extended care facilities, and home health agencies.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week			
	Cl	Lb	Cl	Cr
FALL				
HCT 101 Health Care Technology I	6	2	6	9
	6	2	6	9

SPRING
Choose at least 1 course from the following:

Course Title	Cl	Lb	Cl	Cr
HCT 102 Basic Phlebotomy and EKG	1	2	3	3
HCT 103 Environmental Maintenance	1	2	3	3
HCT 104 Restorative Care	1	2	3	3
HCT 105 Basic Respiratory Skills	1	2	3	3

TOTAL CREDIT HOURS: 12-18

CERTIFICATE IN INFORMATION SYSTEMS C 25 26 0

DESCRIPTION

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
FALL			
CIS 111 Basic PC Literacy	1	2	2
CIS 115 Introduction to Prog. and Logic	2	2	3
	3	4	5
SPRING			
CIS 130 Survey of Operating Systems	2	3	3
CSC 139 Visual BASIC Programming	2	3	3
	4	6	6
SUMMER			
CIS 152 Database Concepts and Apps	2	2	3
	2	2	3

Hours Per Week

TOTAL CREDIT HOURS: 14

CERTIFICATE IN INFORMATION SYSTEMS C 25 26
Helpdesk Certificate

DESCRIPTION

The Helpdesk certificate provides the student with basic skills necessary to support users of computing technologies.

Course work will help students develop an ability to communicate technical issues in a manner that customers can comprehend. Students will also be introduced to a variety of diagnostic and instructional tools used to evaluate the performance of computer systems. Additionally, students will be trained in the methodologies for analysis, design, and development of a helpdesk system by way of prototyping, CASE tools and System Development Life Cycle phases.

Graduates should qualify for employment in entry-level positions with helpdesk support firms, businesses or with educational systems that rely on computer systems to manage information.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cn
FALL				
CIS 111	Basic PC Literacy	1	2	2
CIS 115	Intro to Prog and Logic	2	2	3
		3	4	5
SPRING				
CIS 170	Tech Support Functions I	2	2	3
NET 110	Data Comm/Networking	2	2	3
		4	4	6
SUMMER				
CIS 215	Hardware Install/ Maintenance	3	2	4
CIS 276	Helpdesk Anaysis and Design	3	0	3
		6	2	7

TOTAL CREDIT HOURS: 18

CERTIFICATE IN INFORMATION SYSTEMS C 25 26
Internet Technologies

DESCRIPTION

The Internet Technologies certificate provides students with basic knowledge and skills to support Internet and Intranet Networks.

Course work will help students develop the skills necessary to provide support, development and maintenance of Internet and Intranet systems. Students will also develop interface programming and research skills for these systems.

Graduates should qualify for employment in entry-level positions within business, industry, educational systems, and governmental agencies which utilize Internet and Intranet technologies.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cn
FALL				
CIS 111	Basic PC Literacy	1	2	2
CIS 115	Intro to Prog and Logic	2	2	3
CIS 172	Introduction to the Internet	2	3	3
		5	7	8
SPRING				
CIS 130	Survey of Operating Systems	2	3	3
CIS 163	Prog. Interfaces Internet	2	2	3
NET 110	Data Comm/Networking	2	2	3
		6	7	9

TOTAL CREDIT HOURS: 17

CERTIFICATE IN INFORMATION SYSTEMS C 25 26 E
Programming Concentration

DESCRIPTION

Programming is a concentration under the curriculum title of Information Systems. This curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cn
FALL				
CIS 111	Basic PC Literacy	1	2	2
CIS 115	Intro to Prog and Logic	2	2	3
CSC 139	Intro to Visual Basic	2	3	3
		5	7	8
SPRING				
CIS 130	Survey of Operating Systems	2	3	3
CIS 152	Database Concepts and Apps	2	2	3
		4	5	6

TOTAL CREDIT HOURS: 14

CERTIFICATE IN MAGNETIC RESONANCE IMAGING
C 45 20 0

DESCRIPTION

The Magnetic Resonance Imaging certificate, a specialty for radiographers and nuclear medicine technologists, prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes. *Individuals entering this curriculum must be registered or registry eligible imaging technologists.*

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced-Level testing in Magnetic Resonance Imaging examinations. They may find employment in facilities which perform these imaging procedures.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week			
		Cl	Lb	Cn	Cr
SPRING					
MRI 210	MRI Physics and Equipment	3	0	0	3
MRI 211	MRI Procedures	4	0	0	4
MRI 227	MRI Clinical Practicum	0	0	21	7
		7	0	21	14
SUMMER (First Half Semester)					
MRI 224	MRI Clinical Practicum	0	0	12	4
		0	0	12	4

TOTAL CREDIT HOURS: 18

CERTIFICATE IN MANUFACTURING
ENGINEERING TECHNOLOGY C 40 30 0

DESCRIPTION:

The Manufacturing Engineering Technology certificate curriculum is targeted at persons employed in design and manufacturing-related industries. The primary objective of this program is the development of the student's mechanical analytical abilities required for advancement. The program provides the foundation to handle higher-level technical skills in the ever-advancing technological industrial environment.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL - 1st Year				
MAT 121	Algebra/			
	Trigonometry I	2	2	3
DFT 111	Tech. Drafting I	2	6	4
		4	**8**	**7**
SPRING - 1st Year				
PHY 131	Physics-Mechanics	3	2	4
		3	**2**	**4**
FALL - 2nd Year				
MEC 251	Statics	2	2	3
		2	**2**	**3**
SPRING - 2nd Year				
MEC 252	Strength of Materials	2	2	3
		2	**2**	**3**

TOTAL CREDIT HOURS: 17

CERTIFICATE IN OFFICE SYSTEMS TECHNOLOGY

C 25 36 0

DESCRIPTION

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management. Graduates receive preparation to take the Certified Professional Secretary (CPS) exam.

CURRICULUM BY SEMESTERS

Course Title	Cl	Lb	Cr
FALL			
CIS 111 Basic PC Literacy	1	2	2
ENG 111 Expository Writing	3	0	3
ENG 111A Expository Writing Lab	0	2	1
OST 131 Keyboarding	1	2	2
	5	6	8
SPRING			
OST 134 Text Entry and Formatting	3	2	4
OST 136 Word Processing	1	2	2
OST 164 Text Editing Applications	3	0	3
	7	4	9

Hours Per Week

TOTAL CREDIT HOURS: 17

CERTIFICATE IN OFFICE SYSTEMS TECHNOLOGY C 25 36 0
Evening Curriculum

DESCRIPTION

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management. Graduates receive preparation to take the Certified Professional Secretary (CPS) exam.

CURRICULUM BY SEMESTERS

Course Title		Hours Per Week		
		Cl	Lb	Cr
FALL				
ENG 111	Expository Writing	3	0	3
ENG 111A	Expository Writing Lab	0	2	1
OST 131	Keyboarding	1	2	2
		4	**4**	**6**
SPRING				
CIS 111	Basic PC Literacy	1	2	2
OST 134	Text Entry and			
	Formatting	3	2	4
		4	**4**	**6**
SUMMER				
OST 136	Word Processing	1	2	2
OST 164	Text Editing Applications	3	0	3
		4	**2**	**5**

TOTAL CREDIT HOURS: 17

CERTIFICATE IN REAL ESTATE C 25 40 0

DESCRIPTION

The Real Estate curriculum provides the prelicensing education required by the North Carolina Real Estate Commission, prepares individuals to enter the profession, and offers additional education to meet professional development needs.

Course work includes the practices and principles of real estate, emphasizing financial and legal applications, property development, and property values.

Graduates should qualify for North Carolina Real Estate Sales and Broker examinations. They should be able to enter apprenticeship training and to provide real estate services to consumers in a competent manner.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	Cl	Cl	Cr
FALL			
RLS 112 Real Estate Fundamentals	4	0	4
RLS 113 Real Estate Mathematics	2	0	2
	6	**0**	**6**
SPRING			
RLS 114 Real Estate Brokerage	2	0	2
RLS 115 Real Estate Finance	2	0	2
	4	**0**	**4**
SUMMER			
CIS 111 Basic PC Literacy	2	0	2
RLS 116 Real Estate Law	1	2	2
	3	**2**	**4**

TOTAL CREDIT HOURS: 14

CERTIFICATE IN REAL ESTATE APPRAISAL C 25 42 0

DESCRIPTION

The Real Estate Appraisal curriculum is designed to prepare individuals to enter the appraisal profession as a registered trainee and advance to licensed or certified appraiser levels.

Course work includes appraisal theory and concepts with applications, the North Carolina Appraisers Act, North Carolina Appraisal Board rules, and the Uniform Standards of Professional Appraisal Practice.

Graduates should be prepared to complete the North Carolina Registered Trainee Examinations and advance to licensure or certification levels as requirements are met.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	Cl	Cl	Cr
FALL			
REA 101 Intro. to Real Estate Appraisal R-1	2	0	2
REA 201 Intro. to Income Property Appraisal G-1	2	0	2
	4	0	4
SPRING			
REA 102 Valuation Principles and Practice R-2	2	0	2
REA 202 Adv. Income Capital Proc. G-2	2	0	2
	4	0	4
SUMMER			
REA 103 Applied Residential Prop. Val. R-3	2	0	2
REA 203 Applied Income Property Val. G-3	2	0	2
	4	0	4

TOTAL CREDIT HOURS: 12

CERTIFICATE IN WELDING C 50 42 0

DESCRIPTION:

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

CURRICULUM BY SEMESTERS

Course Title	Hours Per Week		
	Cl	Cl	Cr
FALL			
WLD 110 Cutting Processes	1	3	2
WLD 115 SMAW (Stick) Plate	2	9	5
	3	12	7
SPRING			
WLD 121 GMAW (Mig) FCAW/Plate	2	6	4
WLD 131 GTAW (Tig) Plate	2	6	4
	4	12	8
SUMMER			
WLD 141 Symbols and Specifications	2	2	3
	2	2	3

TOTAL CREDIT HOURS: 18

Developmental Education Program
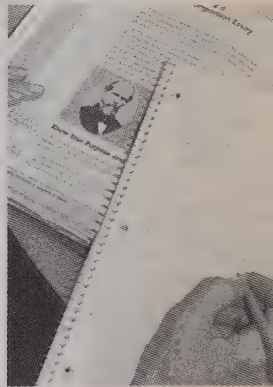
DEVELOPMENTAL EDUCATION PROGRAM

CURRICULUM DESCRIPTION

The Developmental Education Program provides students with an opportunity to build academic skills and acquire the background which should facilitate success in their desired curriculum.

For applicants to a degree curriculum who, on the basis of test results and past performance, do not qualify for immediate admission to their chosen program of study, noncredit developmental course work is available and may be required as a prerequisite for registration in specific credit courses. Students taking the required developmental work may also take specified courses within their desired curriculum.

Students may transfer all applicable credit courses into their curriculum when the criteria have been met and developmental and selected curriculum courses have been completed. All credit courses within the student's chosen curriculum will then be applied toward graduation.

Some developmental courses are also open to students who wish to take them for personal benefit.

This program offers a series of courses for preparation, remediation, and guidance for students who, for a variety of reasons, do not meet the specific entrance requirements for the regular curriculums of their choice. Students who do meet the minimum entrance requirements but whose previous academic records indicate that they may have difficulty in successfully completing their curriculums are also advised to complete the necessary coursework in the Developmental Education program.

The students' academic program will be individually designed to meet their specific preparatory and remedial needs. The courses will be selected from the developmental offerings and from technical and/or vocational credit courses.

SAMPLE COURSE LISTING

		Cl	Lb	Cr
ACA 115	Success and Study Skills	0	2	1

KEY TO SAMPLE COURSE LISTING

ACA . . . . .Course Prefix

115 . . . . .Course Number

Success and Study Skills . . . . . . .Course Title

Cl
  0 . . .Number of Classroom Hours Per Week

Lb
  2 . . .Number of Laboratory Hours Per Week

Cr
  1 . . . . . . .Number of Semester Hours Credit

COURSE OFFERINGS

Course Title		Hours Per Week		
		Cl	Lb	Cr
ACA 115	Success and Study Skills	0	2	1
ACA 118	College Study Skills	1	2	2
BIO 090	Foundations of Biology	3	2	0(4)
BIO 094	Concepts of Human Biology	3	2	0(4)
CHM 092	Fundamentals of Chemistry	3	2	0(4)
CIS 113	Computer Basics	0	2	1
EFL 091	Composition I	3	2	0(4)
ENG 060	Speaking English Well	2	0	0(2)
ENG 070	Basic Language Skills	2	2	0(3)
ENG 080	Writing Foundations	3	2	0(4)
ENG 085	Reading and Writing Foundations	5	0	0(5)
ENG 085A	Reading and Language Ess Lab	0	2	0(1)
ENG 090	Composition Strategies	3	0	0(3)
ENG 090A	Comp Strategies Lab	0	2	0(1)
ENG 095	Reading and Comp Strategies	5	0	0(5)
ENG 095A	Reading and Language Ess Lab	0	2	0(1)
MAT 060	Essential Mathematics	3	2	0(4)
MAT 070	Introductory Algebra	3	2	0(4)
MAT 080	Intermediate Algebra	3	2	0(4)
MAT 090	Accelerated Algebra	3	2	0(4)
RED 070	Essential Reading Skills	3	2	0(4)
RED 080	Intro to College Reading	3	2	0(4)
RED 090	Improved College Reading	3	2	0(4)

*Equivalent credit hours shown in parentheses

Course Descriptions
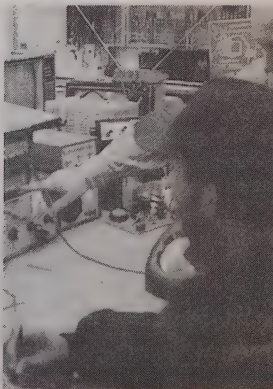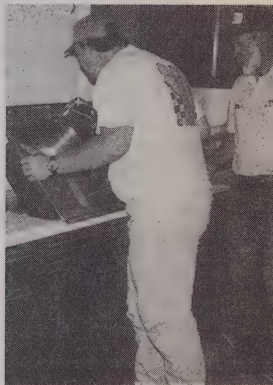
The * beside a course number indicates that the course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

ACADEMIC RELATED

ACA 111   College Student Success   1 0 1

Prerequisites: None   Corequisites: None

This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives.

ACA 115   Success & Study Skills   0 2 1

Prerequisites: None   Corequisites: None

This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

ACA 118   College Study Skills   1 2 2

Prerequisites: None   Corequisites: None

This course covers skills and strategies designed to improve study behaviors. Topics include time management, note taking, test taking, memory techniques, active reading strategies, critical thinking, communication skills, learning styles, and other strategies for effective learning. Upon completion, students should be able to apply appropriate study strategies and techniques to the development of an effective study plan.

ACA 220   Professional Transition   1 0 1

Prerequisites: None   Corequisites: None

This course provides preparation for meeting the demands of employment or education beyond the community college experience. Emphasis is placed on strategic planning, gathering information on workplaces or colleges, and developing human interaction skills for professional, academic, and/or community life. Upon completion, students should be able to successfully make the transition to appropriate workplaces or senior institutions.

ACCOUNTING

ACC 120   Prin of Accounting I   3 2 4

Prerequisites None   Corequisites: None

This course introduces the basic principles and procedures of accounting. Emphasis is placed on collecting, summarizing, analyzing, and reporting financial information. Upon completion, students should be able to analyze data and prepare journal entries and reports as they relate to the accounting cycle.

ACC 121   Prin of Accounting II   3 2 4

Prerequisites: ACC 120   Corequisites: None

This course is a continuation of ACC 120. Emphasis is placed on corporate and managerial accounting for both external and internal reporting and decision making. Upon completion, students should be able to analyze and record corporate transactions, prepare financial statements and reports, and interpret them for management.

ACC 129   Individual Income Taxes   2 2 3

Prerequisites: None   Corequisites:None

This course introduces the relevant laws governing individual income taxation. Emphasis is placed on filing status, exemptions for dependents, gross income, adjustments, deductions, and computation of tax. Upon completion, students should be able to complete various tax forms pertaining to the topics covered in the course.

ACC 130   Business Income Taxes   2 2 3

Prerequisites: None   Corequisites: None

This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax depreciation, accounting periods and methods, corporations, partnerships, S corporations, estates and trusts, and gifts. Upon completion, students should be able to complete various tax forms pertaining to the topics covered in the course.

ACC 150   Computerized Gen Ledger   1 2 2

Prerequisites: ACC 115, ACC 120 & CIS 111

Corequisites: None

This course introduces microcomputer applications related to the major accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems.

ACC 170   Technical Accounting   2 3 3

Prerequisites: Completion of curriculum mathematics requirement   Corequisites: None

This course introduces the use of accounting for decision making and covers integration of financial accounting with managerial concepts. Topics include essentials of financial accounting and analysis, product costing, activity-based costing systems, budgeting, and financial planning. Upon completion, students should be able to understand and develop financial statements and demonstrate an understanding of accounting transactions and product costing systems. This course is restricted to students enrolled in the Funeral Service Education Curriculum.

ACC 220 Intermediate Accounting I 3 2 4

Prerequisites: ACC 121   Corequisites: None

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and statements and extensive analyses of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

ACC 221 Intermediate Accounting II 3 2 4

Prerequisites: ACC 220   Corequisites: None

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analysis, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC 225 Cost Accounting 3 0 3

Prerequisites: ACC 121   Corequisites:None

This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC 226 Managerial Accounting 3 0 3

Prerequisites: ACC 121   Corequisites:None

This course is designed to develop an appreciation for the uses of cost information in the administration and control of business organizations. Emphasis is placed on how accounting data can be interpreted and used by management in planning and controlling business activities. Upon completion, students should be able to analyze and interpret cost information and present this information in a form that is usable by management.

ACC 250 Advanced Accounting 3 0 3

Prerequisites: ACC 220   Corequisites:None

This course is designed to analyze the special problems in accounting for business combinations and consolidated corporate entities. Emphasis is placed on accounting for mergers and consolidations and preparing consolidated working papers and consolidated financial statements. Upon completion, students should be able to solve a wide variety of problems by advanced application of accounting principles and procedures.

ACC 269 Auditing 3 0 3

Prerequisites: ACC 220   Corequisites: None

This course covers the overall framework of the process of conducting audits and investigations. Emphasis is placed on collecting data from working papers, arranging and systematizing the audit, and writing the audit report. Upon completion, students should be able to demonstrate competence in applying the generally accepted auditing standards and the procedures for conducting an audit.

ACC 279 Advanced Auditing 3 0 3

Prerequisites: ACC 269   Corequisites:None

This course provides advanced experience in the process of conducting audits and investigations. Emphasis is placed on statistical sampling, analysis, audit program development, professional responsibilities, and the reporting function. Upon completion, students should be able to demonstrate proficiency through completion of audit simulations and/or integrated audit cases.

AIR CONDITIONING, HEATING, AND REFRIGERATION

AHR 110 Intro to Refrigeration 2 6 5

Prerequisites: None   Corequisites: None

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

AHR 111 HVACR Electricity 2 2 3

Prerequisites: None   Corequisites: None

This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

AHR 112 Heating Technology 2 4 4

Prerequisites: None   Corequisites: None

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

AHR 113   Comfort Cooling   2 4 4

Prerequisites: None   Corequisites: None

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

AHR 114   Heat Pump Technology   2 4 4

Prerequisites: AHR 110 or AHR 113

Corequisites: None

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

AHR 130   HVAC Controls   2 2 3

Prerequisites: AHR 111 or ELC 111

Corequisites: None

This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

AHR 160   Refrigerant Certification 1 0 1

Prerequisites: None   Corequisites: None

This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

AHR 212   Advanced Comfort Systems 2 6 4

Prerequisites: AHR 114   Corequisites: None

This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water-source systems and the mechanical and electronic control components of advanced comfort systems. Upon completion, students should be able to test, analyze, and troubleshoot water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pumps.

AHR 250   HVAC System Diagnostics 0 4 2

Prerequisites: None   Corequisites: AHR 212

This course is a comprehensive study of air conditioning, heating, and refrigeration system diagnostics and corrective measures. Topics include advanced system analysis, measurement of operating efficiency, and inspection and correction of all major system components. Upon completion, students should be able to restore a residential or commercial AHR system so that it operates at or near manufacturers' specifications.

AMERICAN INSTITUTE OF BANKING

AIB 110   Principles of Banking   3 0 3

Prerequisites: None   Corequisites: None

This course covers the fundamentals of bank functions in a descriptive fashion. Topics include banks and the monetary system, the relationship of banks to depositors, the payment functions, bank loans and accounting, regulations, and examinations. Upon completion, students should be able to demonstrate an understanding of the business of banking from a broad perspective.

AIB 131   Fund of Bank Lending   3 0 3

Prerequisites: ACC 120   Corequisites:None

This course introduces the basic knowledge and skills needed to be an effective lender. Topics include the functions of the loan interview and credit investigation, the C's of credit, elements of loan documentation, and warning signs of problem loans. Upon completion, students should be able to demonstrate an understanding of the credit functions and regulatory issues affecting this key banking function.

AIB 141   Law & Banking: Principles 3 0 3

Prerequisites: None   Corequisites: None

This course provides an overview of the legal aspects of banking and the legal framework within which banks function. Topics include the court system, consumer protection, tangible and intangible property ownership, and the legalities and regulations of bank transactions. Upon completion, students should be able to discuss the non-technical aspects of the legal system and how these affect the bank's organization and operation.

AIB 152   Trust Business   3 0 3

Prerequisites: None   Corequisites: None

This course provides an overview of the trust department. Emphasis is placed on the different types of individual and corporate trusts, agencies, and services. Upon completion, students should be able to explain the role of the trust department and identify the services provided and to whom they are delivered.

AIB 222   Money and Banking   3 0 3

Prerequisites: None   Corequisites: None

This course provides a fundamental treatment of how money and banks function in the US and world economies. Topics include the roles of money in the US economy, the functions of the Federal Reserve Board, and the workings of monetary and fiscal policies. Upon completion, students should be able to explain how the monetary economy functions, how banks are creators of money, and the impact of the Federal Reserve.

AIB 245   Bank Investments   3 0 3

Prerequisites: None   Corequisites: None

This course introduces the factors that affect investment strategies and decisions grounded in a framework of fundamental investment concepts such as risk, liquidity, and yield. Topics include profit and risk analysis, characteristics of specific investment instruments, funds strategies, and investment risks and returns. Upon completion, students should be able to identify and describe bank securities, identify tax factors in bank investments, and define investment accounts and maturity strategies.

AIB 254   Securities Processing   3 0 3

Prerequisites: None   Corequisites: None

This course covers the elements of securities transactions that affect obligations, options, rights of securities issues, and stockholders. Topics include types of securities, the marketplace, and how automated systems help the trading process and regulations. Upon completion, students should be able to demonstrate knowledge and skills concerning specific securities processing activities.

ARCHITECTURE

ARC 111   Intro to Arch Technology 1 6 3

Prerequisites: None   Corequisites: None

This course introduces basic architectural drafting techniques, lettering, use of architectural and engineer scales, and sketching. Topics include orthographic, axonometric, and oblique drawing techniques using architectural plans, elevations, sections, and details; reprographic techniques; and other related topics. Upon completion, students should be able to prepare and print scaled drawings within minimum architectural standards. Additionally, this course will include topics related to sketching techniques.

ARC 112   Constr Matls & Methods 3 2 4

Prerequisites: None   Corequisites: None

This course introduces construction materials and their methodologies. Topics include construction terminology, materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties.

ARC 113   Residential Arch Tech   1 6 3

Prerequisites: ARC 111   Corequisites:ARC 112

This course covers intermediate residential working drawings. Topics include residential plans, elevations, sections, details, schedules, and other related topics. Upon completion, students should be able to prepare a set of residential working drawings that are within accepted architectural standards. Additionally, this course will include topics related to residential design and planning principles.

ARC 114   Architectural CAD   1 3 2

Prerequisites: ARC 111 or LAR 111

Corequisites: None

This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should be able to prepare and plot architectural drawings to scale within accepted architectural standards.

ARC 131   Building Codes   2 2 3

Prerequisites: ARC 112   Corequisites: None

This course covers the methods of researching building codes for specific projects. Topics include residential and commercial building codes. Upon completion, students should be able to determine the code constraints governing residential and commercial projects. Additionally, this course will include topics related to land and development and zoning ordinances.

ARC 141   Elem Structures for Arch 4 0 4

Prerequisites: ARC 111 and MAT 121

Corequisites: None

This course covers concepts of elementary structures in architecture. Topics include structural form, statics, strength of materials, structural behavior, and the relationship between structures and architectural form. Upon completion, students should be able to size simple structural elements.

ARC 211   Light Constr Technology 1 6 3

Prerequisites: ARC 111 Corequisites: ARC 112

This course covers working drawings for light construction. Topics include plans, elevations, sections, and details; schedules; and other related topics. Upon completion, students should be able to prepare a set of working drawings which are within accepted architectural standards. Students will also visit construction sites to view the relationship between the drawn and built environment.

ARC 212   Commercial Constr Tech 1 6 3

Prerequisites: ARC 211   Corequisites: None

This course introduces regional construction techniques for commercial plans, elevations, sections, and details. Topics include production of a set of commercial contract documents and other related topics. Upon completion, students should be able to prepare a set of working drawings in accordance with building codes. Students will also visit construction sites to view the relationship between the drawn and built environment.

ARC 213   Design Project 2 6 4

Prerequisites: ARC 114 and ARC 211

Corequisites: None

This course provides the opportunity to design and prepare a set of contract documents within an architectural setting. Topics include schematic design, design development, construction documents, and other related topics. Upon completion, students should be able to prepare a set of commercial contract documents.

ARC 221   Architectural 3-D CAD 1 4 3

Prerequisites: ARC 114   Corequisites: None

This course introduces architectural three-dimensional CAD applications. Topics include three-dimensional drawing, coordinate systems, viewing, rendering, modeling, and output options. Upon completion, students should be able to prepare architectural three-dimensional drawings and renderings. Additionally, students will make a simple animation, and explore other computer presentation processes.

ARC 230   Environmental Systems 3 3 4

Prerequisites: ARC 111 and MAT 121

Corequisites: None

This course introduces plumbing, mechanical (HVAC), and electrical systems for the architectural environment. Topics include basic plumbing, mechanical, and electrical systems for residential and/or commercial buildings with an introduction to selected code requirements. Upon completion, students should be able to develop schematic drawings for plumbing, mechanical, and electrical systems and perform related calculations.

ARC 231   Arch Presentations 2 4 4

Prerequisites: ARC 111   Corequisites: None

This course introduces architectural presentation techniques. Topics include perspective drawing, shadow projection, texturization, rendered plans, elevations, and other related topics. Upon completion, students should be able to present ideas graphically and do rendered presentation drawings. Additionally, students will incorporate computer technology into the presentation process.

ARC 235   Architectural Portfolio 2 3 3

Prerequisites: None   Corequisites: None

This course covers the methodology for the creation of an architectural portfolio. Topics include preparation of marketing materials and a presentation strategy using conventional and/or digital design media. Upon completion, students should be able to produce an architectural portfolio of selected projects. Additionally, this course will include topics related to resume and job interview preparation.

ARC 240   Site Planning 2 2 3

Prerequisites: ARC 111   Corequisites: None

This course introduces the principles of site planning, grading plans, and earthwork calculations. Topics include site analysis, site work, site utilities, cut and fill, soil erosion control, and other related topics. Upon completion, students should be able to prepare site development plans and details and perform cut and fill calculations.

ARC 250   Survey of Architecture 3 0 3

Prerequisites: None   Corequisites: None

This course introduces the historical trends in architectural form. Topics include historical and current trends in architecture. Upon completion, students should be able to demonstrate an understanding of significant historical and current architectural styles.

ARC 264   Digital Architecture 1 3 2

Prerequisites: ARC 114   Corequisites:None

This course covers multiple digital architectural techniques. Topics include spreadsheets and word processing procedures, on-line resources, modems, e-mail, image capture, multimedia, and other related topics. Upon completion, students should be able to transmit/receive electronic data, create multimedia presentations, and produce a desktop publishing document.

ART

ART 111*   Art Appreciation 3 0 3

Prerequisites: None   Corequisites: None

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media.

ASTRONOMY

AST 111*   Descriptive Astronomy 3 0 3

Prerequisites: None   Corequisites: None

This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students

should be able to demonstrate an understanding of the universe around them.

AST 111A* Descriptive Astronomy Lab 0 2 1

Prerequisites: None   Corequisites: AST 111

The course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them.

AUTOMATION TRAINING

ATR 112   Intro to Automation   2 3 3

Prerequisites: None   Corequisites None

This course introduces the basic principles of automated manufacturing and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems.

ATR 211   Robot Programming   2 3 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course provides the operational characteristics of industrial robots and programming in their respective languages. Topics include robot programming utilizing teach pendants, PLCs, and personal computers; and the interaction of external sensors, machine vision, network systems, and other related devices. Upon completion, students should be able to program and demonstrate the operation of various robots.

ATR 213   Programmable Controllers   3 3 4

Prerequisites: ELC 131   Corequisites: None

This course provides a detailed study of the PLC, related hardware and programming format, and applications in the automated work cell. Topics include input/output modules, power supplies, operator interface, ladder logic, and Boolean language programming. Upon completion, students should be able to install, program, and maintain PLC-controlled systems.

ATR 214   Advanced PLCs   3 3 4

Prerequisites: ATR 213   Corequisites: None

This course introduces the study of high-level programming languages and advanced I/O modules. Topics include STATEMENT, GRAFCET, or other advanced programming languages; system networking; computer interfacing; analog and other intelligent I/O modules; and system troubleshooting. Upon completion, students should be able to write and

troubleshoot systems using high-level languages and complex I/O modules.

ATR 215   Sensors and Transducers 2 3 3

Prerequisites: ELN 131   Corequisites: None

This course provides the theory and application of sensors typically found in an automated manufacturing system. Topics include physical properties, operating range, and other characteristics of numerous sensors and transducers used to detect temperature, pressure, position, and other desired physical parameters. Upon completion, students should be able to properly interface a sensor to a PLC, PC, or process control system.

ATR 218   Comp Intg Manufacturing 2 3 3

Prerequisites: ATR 211   Corequisites: None

This course introduces high technology systems which are currently being used in new automated manufacturing facilities. Topics include integration of robots and work cell components, switches, proximity vision and photoelectric sensors, with the automated control and data gathering systems. Upon completion, students should be able to install, program, and troubleshoot an automated manufacturing cell and its associated data communications systems.

ATR 219   Auto Sys Troubleshooting 1 3 2

Prerequisites: ATR 213   Corequisites: None

This course introduces troubleshooting procedures used in automated systems. Topics include logical fault isolation, diagnostic software usage, component replacement techniques, and calibration; safety of equipment; and protection of equipment while troubleshooting. Upon completion, students should be able to analyze and troubleshoot an automated system.

AUTOBODY REPAIR

AUB 111   Painting & Refinishing I   2 6 4

Prerequisites: None   Corequisites: None

This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards.

AUB 112   Painting & Refinishing II 2 6 4

Prerequisites: AUB 111   Corequisites: None

This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing

problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems.

AUB 114   Special Finishes   1 2 2

Prerequisites: AUB 111   Corequisites: None

This course introduces multistage finishes, custom painting, and protective coatings. Topics include base coats, advanced intermediate coats, clear coats, and other related topics. Upon completion, students should be able to identify and apply specialized finishes based on accepted industry standards.

AUB 121   Non-Structural Damage I 1 4 3

Prerequisites: None   Corequisites: None

This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal/repairing/ replacing of body panels to accepted standards.

AUB 122   Non-Structural Damage II 2 6 4

Prerequisites: None   Corequisites: None

This course covers safety, tools, and advanced body repair . Topics include shop safety, damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware.

AUB 131   Structural Damage I   2 4 4

Prerequisites: None   Corequisites: None

This course introduces safety, equipment, structural damage analysis, and damage repairs. Topics include shop safety, design and construction, structural analysis and measurement, equipment, structural glass, repair techniques, and other related topics. Upon completion, students should be able to analyze and perform repairs to a vehicle which has received light/moderate structural damage.

AUB 132   Structural Damage II   2 6 4

Prerequisites: AUB 131   Corequisites: None

This course provides an in-depth study of structural damage analysis and repairs to vehicles that have received moderate to heavy structural damage. Topics include shop safety, structural analysis and measurement, equipment, structural glass, advanced repair techniques, structural component replacement and alignment, and other related topics. Upon completion, students should

be able to analyze and perform repairs according to industry standards.

AUB 134   Autobody MIG Welding   1 4 3

Prerequisites: None   Corequisites: None

This course covers the terms and procedures for welding the various metals found in today's autobody repair industry with an emphasis on personal/environmental safety. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, and other related topics. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standards.

AUB 136   Plastics & Adhesives   1 4 3

Prerequisites: None   Corequisites: None

This course covers safety, plastic and adhesive identification, and the various repair methods of automotive plastic components. Topics include safety, identification, preparation, material selection, and the various repair procedures including refinishing. Upon completion, students should be able to identify, remove, repair, and/or replace automotive plastic components in accordance with industry standards.

AUB 150   Automotive Detailing   1 3 2

Prerequisites: None   Corequisites: None

This course covers the methods and procedures used in automotive detailing facilities. Topics include safety, engine, interior and trunk compartment detailing, buffing/polishing exterior surfaces, and cleaning and reconditioning exterior trim, fabrics, and surfaces. Upon completion, students should be able to improve the overall appearance of a vehicle.

AUB 160   Body Shop Operations   1 0 1

Prerequisites: None   Corequisites: None

This course introduces the day-to-day operations of autobody repair facilities. Topics include work habits and ethics, customer relations, equipment types, materials cost and control, policies and procedures, shop safety and liabilities, and other related topics. Upon completion, students should be able to understand the general operating policies and procedures associated with an autobody repair facility.

AUB 162   Autobody Estimating   1 2 2

Prerequisites: None   Corequisites: None

This course provides a comprehensive study of autobody estimating. Topics include collision damage analysis, industry regulations, flat-rate and estimated time, and collision estimating manuals. Upon completion, students should be able to prepare and interpret a damage report.

AUTOMOTIVE

AUT 110   Intro to Auto Technology 2 2 3

Prerequisites: None   Corequisites: None

This course covers the basic concepts and terms of automotive technology, workplace safety, North Carolina state inspection, safety and environmental regulations, and use of service information resources. Topics include familiarization with components along with identification and proper use of various automotive hand and power tools. Upon completion, students should be able to describe terms associated with automobiles, identify and use basic tools and shop equipment, and conduct North Carolina safety/emissions inspections.

AUT 115   Engine Fundamentals   2 3 3

Prerequisites: None   Corequisites: None

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis/repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT 116   Engine Repair   1 3 2

Prerequisites: None   Corequisites: None

This course covers service/repair/rebuilding of block, head, and internal engine components. Topics include engine repair/reconditioning using service specifications. Upon completion, students should be able to rebuild/recondition an automobile engine to service specifications.

AUT 141   Suspension & Steering Systems   2 4 4

Prerequisites: None   Corequisites: None

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair various steering and suspension components, check and adjust various alignment angles, and balance wheels.

AUT 151   Brake Systems   2 2 3

Prerequisites: None   Corequisites: None

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT 161   Electrical Systems   2 6 4

Prerequisites: None   Corequisites: None

This course covers basic electrical theory and wiring diagrams, test equipment, and diagnosis/repair/replacement of batteries, starters, alternators, and basic electrical accessories. Topics include diagnosis and repair of battery, starting, charging, lighting, and basic accessory systems problems. Upon completion, students should be able to diagnose, test, and repair the basic electrical components of an automobile.

AUT 164   Automotive Electronics   2 2 3

Prerequisites: None   Corequisites: None

This course covers fundamentals of electrical/electronic circuitry, semi-conductors, and microprocessors. Topics include Ohm's law, circuits, AC/DC current, solid state components, digital applications, and the use of digital multimeters. Upon completion, students should be able to apply Ohm's law to diagnose and repair electrical/electronic circuits using digital multimeters and appropriate service information.

AUT 171   Heating & Air Conditioning 2 3 3

Prerequisites: None   Corequisites: None

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis/repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

AUT 181   Engine Performance- Electrical   2 3 3

Prerequisites: None   Corequisites: None

This course covers the principles, systems, and procedures required for diagnosing and restoring engine performance using electrical/electronics test equipment. Topics include procedures for diagnosis and repair of ignition, emission control, and related electronic systems. Upon completion, students should be able to describe operation of and diagnose/repair ignition/emission control systems using appropriate test equipment and service information.

AUT 183   Engine Performance-Fuels 2 3 3

Prerequisites: None   Corequisites: None

This course covers the principles of fuel delivery/management, exhaust/emission systems,

and procedures for diagnosing and restoring engine performance using appropriate test equipment. Topics include procedures for diagnosis/repair of fuel delivery/management and exhaust/emission systems using appropriate service information. Upon completion, students should be able to describe, diagnose, and repair engine fuel delivery/management and emission control systems using appropriate service information and diagnostic equipment.

AUT 211   Automotive Machining   2 6 4

Prerequisites: None   Corequisites: None

This course covers engine machining processes for remanufacturing automotive engines. Emphasis is placed on cylinder head service, machining block surfaces, reconditioning connecting rod assemblies, camshafts, flywheels, and precision measurement. Upon completion, students should be able to explain the operation and proper use of automotive machining equipment.

AUT 221   Automatic Transmissions 2 6 4

Prerequisites: None   Corequisites: None

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair automatic drive trains.

AUT 231   Manual Drive Trains/Axles   2 3 3

Prerequisites: None   Corequisites: None

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair manual drive trains.

AUT 241   Adv Chassis/Suspension   2 6 4

Prerequisites: AUT 141   Corequisites: None

This course provides advanced training in automotive chassis and suspension using computerized two- and four-wheel alignment equipment. Emphasis is placed on suspension and chassis system design, construction, and repair for modern front- and rear-drive vehicles. Upon completion, students should be able to perform necessary adjustments and repairs on vehicles using computerized alignment equipment.

AUT 251   Introduction to Racing   3   0   3

Prerequisites: Completion of first year in the Systems Technology program or by permission of department head.   Corequisites: None

This course provides information on the different types of racing, types of chassis, designs and safety used when working in a racing environment. Topics include safety at the shop and the track, information on how to get started in racing, what type car and how mich it will cost. Upon completion, students should be able to wok with reasonable safety at both shop and track, know the types of racing available and the cost.

AUT 252   Racing Engine Preparation 3   0   3

Prerequisites: Completion of first year in the Systems Technology program or by permission of department head.   Corequisites: None

This course includes how to select and fit the proper engine components to maximize power and reliability in today's racing engines. Topics includes component selection, blueprinting, machining of components, cylinder head and block preparation, balancing, matching of heads, intake manifold, and camshaft for maximum power. Upon completion, students should be able to assemble into a complete racing engine.

AUT 253 Racing Engine Accessories 2   4   4

Prerequisites: Completion of first year in the Systems Technology program or by permission of department head.   Corequisites:None

This course provides information to the student no how to select and use the components on the ignition, fuel, oiling and cooling system. Emphasis is placed on selection of the type of systems, how to install the systems and maximize its efficiency for engine power and life. Upon completion, students should be able to install, with modifications necessary for a particular application, the Ignition, Fuel, Oiling, and Cooling System.

AUT 254   Chassis Fabrication   3   9   6

Prerequisites: Completion of first year in the Systems Technology program or by permission of department head.   Corequisites:None

This course is designed to instruct the student to follow or design their own and build a racing chassis. Topics include how to cut and fit various types of tubing, and be able to use the machines and saws necessary to fabricate the race car components. Upon completion, the student should be able to build a racing chassis with the correct geometric angles.

AUT 255   Sheet Metal Fabrication   1 6 3

Prerequisites: Completion of first year in the Systems Technology program or by permission of department head.   Corequisites: None

This course is designed to build student's skills with various tools and equipment necessary to make interior and exterior sheet metal panels. Emphasis is placed on how to cut, bend, and shape sheet metal into various parts necessary to build a race car. Upon completion, students should be able to form and fit to the chassis the

metal panels that they or another manufacturer has made.

AUT 256   Setting up the Race Car   4 4 6

Prerequisites: Completion of first year in the Systems Technology program or by permission of department head.   Corequisites: None

This course covers how to select the right chassis, springs, and shocks; how to be able to communicate with driver, and make adjustments at the race track. Topics include spring and shock brands, rates, and application; how to make changes and keep proper records of control arm angles, frame height and chassis travel. Upon completion, the student should be able to check tire temperature, check shock travel and know how changes in the chassis set-up will increase performance.

AUT 281   Adv Engine Performance   2 2 3

Prerequisites: None   Corequisites: None

This course utilizes service information and specialized test equipment to diagnose/repair power train control systems. Topics include computerized ignition, fuel and emission systems, related diagnostic tools and equipment, data communication networks, and service information. Upon completion, students should be able to perform advanced engine performance diagnosis and repair.

BIOLOGY

BIO 090   Foundations of Biology   3 2 4

Prerequisites: None   Corequisites: RED 090

This course introduces basic biological concepts. Topics include basic biochemistry, cell structure and function, interrelationships among organisms, scientific methodology, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level biology courses.

BIO 094   Concepts of Human Biology 3 2 4

Prerequisites: None   Corequisites: RED 090

This course focuses on fundamental concepts of human biology. Topics include terminology, biochemistry, cell biology, tissues, body systems, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level anatomy and physiology courses.

BIO 111*   General Biology I   3 3 4

Prerequisites High School Chemistry or

CHM 092   Corequisites: None

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the

molecular and cellular levels. Enrollment in this course more than twice by written permission of the department chair only.

BIO 112*   General Biology II   3 3 4

Prerequisites: BIO 111 Corequisites: None

This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. Enrollment in this course more than twice by written permission of the department chair only.

BIO 163   Basic Anat & Physiology 4 2 5

Prerequisites: High School Chemistry or

CHM 092   Corequisites: None

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. Enrollment in this course more than twice by written permission of the department chair only.

BIO 168   Anatomy and Physiology I 3 3 4

Prerequisites:High School Chemistry or

CHM 092   Corequisites: None

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, nervous, special senses, and endocrine systems. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.Enrollment in this course more than twice by written permission of the department chair only.

BIO 169   Anatomy and Physiology II 3 3 4

Prerequisites: BIO 168 Corequisites: None

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.Enrollment in this course more than twice by written permission of the department chair only.

BIO 170   Introductory Microbiology 3 4 3

Prerequisites: High School Chemistry or

CHM 092   Corequisites: None

This course introduces fundamental concepts of microbiology with emphasis on the relationships of microorganisms to humans. Topics include common groups of microorganisms and their relationships to human disease, including means of transmission, body defenses, prevention, control, and treatment. Upon completion, students should be able to practice and recognize the value of aseptic technique in microbial control. Enrollment in this course more than twice by written permission of the department chair only.

BIO 271   Pathophysiology   3 0 3

Prerequisites: BIO 163, BIO 166, or BIO 169

Corequisites: None

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is placed on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology.

BLUEPRINT READING

BPR 111   Blueprint Reading   1 2 2

Prerequisites: None   Corequisites: None

This course introduces the basic principles of blueprint reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic blueprints and visualize the features of a part.

BPR 121   Blueprint Reading: Mech 1 2 2

Prerequisites: BPR 111 or MAC 131

Corequisites: None

This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

BPR 130   Blueprint Reading/Const 1 2 2

Prerequisites: None   Corequisites: None

This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

BUSINESS

BUS 110   Introduction to Business 3 0 3

Prerequisites: None   Corequisites: None

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

BUS 115   Business Law I   3 0 3

Prerequisites: None   Corequisites: None

This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

BUS 116   Business Law II   3 0 3

Prerequisites: BUS 115   Corequisites: None

This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, risk-bearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

BUS 121   Business Math   2 2 3

Prerequisites: None   Corequisites: None

This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

BUS 125   Personal Finance   3 0 3

Prerequisites: None   Corequisites: None

This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

BUS 137   Principles of Management 3 0 3

Prerequisites: None   Corequisites: None

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

BUS 151   People Skills   3 0 3

Prerequisites: None   Corequisites: None

This course introduces the basic concepts of identity and communication in the business setting. Topics include self-concept, values, communication styles, feelings and emotions, roles versus relationships, and basic assertiveness, listening, and conflict resolution.

Upon completion, students should be able to distinguish between unhealthy, self-destructive, communication patterns and healthy, non-destructive, positive communication patterns.

BUS 230 Small Business Management 3 0 3

Prerequisites: None   Corequisites: None

This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

BUS 270 Professional Development 3 0 3

Prerequisites: None   Corequisites: None

This course provides basic knowledge of self-improvement techniques as related to success in the professional world. Topics include positive human relations, job-seeking skills, and projecting positive self-image. Upon completion, students should be able to demonstrate competent personal and professional skills necessary to get and keep a job.

CARPENTRY

CAR 111 Carpentry I 4 15 9

Prerequisites: None   Corequisites: None

This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision.

CAR 112 Carpentry II 4 15 9

Prerequisites: CAR 111   Corequisites: None

This course covers the advanced theory and construction methods associated with the building industry including framing and exterior finishes. Topics include safety, hand/power tool use, measurement and layout, construction framing, exterior trim and finish, and other related topics. Upon completion, students should be able to safely frame and apply exterior finishes to a residential building with supervision.

CAR 113 Carpentry III 3 9 6

Prerequisites: CAR 111   Corequisites: None

This course covers interior trim and finishes. Topics include safety, hand/power tool use, measurement and layout, specialty framing, interior trim and finishes, cabinetry, and other related topics. Upon completion, students should be able to safely install various interior trim and finishes in a residential building with supervision.

CAR 114 Residential Bldg Codes 3 0 3

Prerequisites: None   Corequisites: None

This course covers building codes and the requirements of state and local construction regulations. Emphasis is placed on the minimum requirements of the North Carolina building codes related to residential structures. Upon completion, students should be able to determine if a structure is in compliance with North Carolina building codes.

CAR 115 Res Planning/Estimating 3 0 3

Prerequisites: BPR 130   Corequisites: None

This course covers project planning, management, and estimating for residential or light commercial buildings. Topics include planning and scheduling, interpretation of working drawings and specifications, estimating practices, and other related topics. Upon completion, students should be able to perform quantity take-offs and cost estimates.

COMPUTED TOMOGRAPHY

CAT 210 CT Physics & Equipment 3 0 0 3

Prerequisites: Enrollment in the CT/MRI

program or CT certificate programs

Corequisites: None

This course covers the system operations and components, image processing and display, image quality, and artifacts in computed tomography. Emphasis is placed on the data acquisition components, tissue attenuation conversions, image manipulation, and factors controlling image resolution. Upon completion, students should be able to understand the physics and instrumentation used in computed tomography.

CAT 211 CT Procedures 4 0 0 4

Prerequisites: Enrollment in the CT/MRI

program or CT certificate programs

Corequisites: CAT 210

This course is designed to cover specialized patient care, cross-sectional anatomy, contrast media, and scanning procedures in computed tomography. Emphasis is placed on patient assessment and monitoring, contrast agents' use, radiation safety, methods of data acquisition, and identification of cross-sectional anatomy. Upon completion, students should be able to integrate all facets of the imaging procedures in computed tomography.

CAT 223 CT Clinical Practicum 0 0 9 3

Prerequisites: Enrollment in the CT/MRI

program or CT certificate programs

Corequisites: None

This course provides the opportunity to apply knowledge gained from classroom instruction to

the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in computed tomography. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment.

CAT 228   CT Clinical Practicum   0 0 24 8

Prerequisites: Enrollment in the CT/MRI

program or CT certificate programs

Corequisites: None

This course provides the opportunity to apply knowledge gained from classroom instruction to the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in computed tomography. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment.

COMPUTER ENGINEERING TECHNOLOGY

CET 111 Computer Upgrade/Repair I 2 33

Prerequisites: None   Corequisites: None

This course is the first of two courses covering repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include safety practices, CPU/memory/bus identification, disk subsystem, hardware/software installation/configuration, common device drivers, data recovery, system maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications.

CET 211 Computer Upgrade/Repair II 2 3 3

Prerequisites: CET 111   Corequisites: None

This course is the second of two courses covering repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include resolving resource conflicts and system bus specifications, configuration and troubleshooting peripherals, operating system configuration and optimization, and other related topics. Upon completion, students should be able to identify and resolve system conflicts and optimize system performance.

CET 212   Integrated Mfg Systems   1 3 2

Prerequisites: ELN 237   Corequisites: None

This course covers computer topics related to integrated manufacturing systems common to current manufacturing facilities. Topics include robot programming, automated control systems, PLCs, data communication, and networking in an integrated manufacturing environment, and other related topics. Upon completion, students should be able to program robots using teaching pendants and troubleshoot and maintain network

installations related to integrated manufacturing systems.

CET 222   Computer Architecture   2 0 2

Prerequisites: None   Corequisites: None

This course introduces the organization and design philosophy of computer systems with respect to resource management, throughput, and operating system interaction. Topics include instruction sets, registers, data types, memory management, virtual memory, cache, storage management, multi-processing, and pipelining. Upon completion, students should be able to evaluate system hardware and resources for installation and configuration purposes.

CHEMISTRY

CHM 092 Fundamentals of Chemistry 3 2 4

Prerequisites: High School algebra or

Mat 070   Corequisites: None

This course covers fundamentals of chemistry with laboratory applications. Topics include measurements, matter, energy, atomic theory, bonding, molecular structure, nomenclature, balancing equations, stoichiometry, solutions, acids and bases, gases, and basic organic chemistry. Upon completion, students should be able to understand and apply basic chemical concepts and demonstrate basic laboratory skills necessary for success in college-level science courses. The course will also cover special topics in chemistry intended to reinforce and supplement the basic course material.

CHM 130 Gen, Org, & Biochemistry   3 0 3

Prerequisites: None   Corequisites: None

This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts.

CHM 130A   Gen, Org, & Biochemistry Lab   0 2 1

Prerequisites: None   Corequisites: CHM 130

This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130.

CHM 151*General Chemistry I   3 3 4

Prerequisites: High School Chemistry or

CHM 092   Corequisites: None

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity,

chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152.

CHM 152*General Chemistry II   3 3 4

Prerequisites: CHM 151   Corequisites: None

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields.

INFORMATION SYSTEMS

CIS 110*   Introduction to Computers   2 2 3

Prerequisites: None   Corequisites: None

This course provides an introduction to computers and computing. Topics include the impact of computers on society, ethical issues, and hardware/software applications, including spreadsheets, databases, word processors, graphics, the Internet, and operating systems. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems.

CIS 111   Basic PC Literacy   1 2 2

Prerequisites: None   Corequisites: None

This course provides a brief overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

CIS 112   Windows   1 2 2

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course includes the fundamentals of the Windows software. Topics include graphical user interface, icons, directories, file management, accessories, and other applications. Upon completion, students should be able to use Windows software in an office environment.

CIS 113   Computer Basics   0 2 1

Prerequisites: None   Corequisites: None

This course introduces basic computer usage for non-computer majors. Emphasis is placed on developing basic personal computer skills. Upon completion, students should be able to demonstrate competence in basic computer applications sufficient to use computer-assisted instructional software.

CIS 115*   Intro to Prog & Logic   2 2 3

Prerequisites: MAT 080 or MAT 090

Corequisites: None

This course introduces computer programming and problem solving in a programming environment, including an introduction to operating systems, text editor, and a language translator. Topics include language syntax, data types, program organization, problem-solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language.

CIS 116   Intro PC App Development   2 3 3

Prerequisites: OST 131   Corequisites:CSC 139

This course provides an introductory study of the principles of application development and end-user interface design principles. Emphasis is placed on tables, file management, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design and program a PC application at the introductory level.

CIS 118   IS Professional
Communications   2 0 2

Prerequisites: None   Corequisites: None

This course prepares the information systems professional to communicate with corporate personnel from management to end-users. Topics include information systems cost justification tools, awareness of personal hierarchy of needs, addressing these needs, and discussing technical issues with non-technical personnel. Upon completion, students should be able to communicate information systems issues to technical and non-technical personnel.

CIS 120   Spreadsheet I   2 2 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

CIS 121   User Support & Softw Eval 1 4 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course provides an opportunity to evaluate software and hardware and make recommendations to meet end-user needs. Emphasis is placed on software and hardware evaluation, installation, training, and support. Upon completion, students should be able to

present proposals and make hardware and software recommendations based on their evaluations.

CIS 122   Intro to Business Comp   2 2 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course provides preparation in solving business problems using computers. Topics include hardware and software concepts, the DOS operating system, Windows™, spreadsheets, and communications. Upon completion, students should be able to use DOS commands, navigate a Windows™ environment, use spreadsheet capabilities, and access information in a business environment.

CIS 124   DTP Graphics Software   2 2 3

Prerequisites: None   Corequisites: None

This course introduces graphic design software using a variety of software packages. Emphasis is placed on efficient utilization of software capabilities. Upon completion, students should be able to incorporate appropriate graphic designs into desktop publishing publications.

CIS 126   Graphics Software Intro   2 2 3

Prerequisites: None   Corequisites: None

This course provides an introduction to graphic design and execution of pictorial graphics using a variety of software packages. Emphasis is placed on creation and manipulation of images using graphic design software. Upon completion, students should be able to create graphic designs and incorporate these designs into printed publications.

CIS 128   Computer Language Survey   3 0 3

Prerequisites: None   Corequisites: None

This course provides an opportunity to compare various computer languages. Emphasis is placed on appropriate uses, syntax, and comparative programming. Upon completion, students should be able to select the appropriate language for problem solving.

CIS 130   Survey of Operating Sys   2 3 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

The course covers operating system concepts which are necessary for maintaining and using computer systems. Topics include disk, file, and directory structures; installation and setup; resource allocation, optimization, and configuration; system security; and other related topics. Upon completion, students should be able to install and configure operating systems and optimize performance.

CIS 144   Operating System - DOS   2 2 3

Prerequisites: None   Corequisites: CIS 130

This course introduces operating systems concepts for DOS operating systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a DOS environment.

CIS 145 Operating System - Single-User 2 2 3

Prerequisites: None   Corequisites: CIS 130

This course introduces operating systems concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a single-user environment.

CIS 146   Operating System - OS/2   22 3

Prerequisites: None   Corequisites: CIS 130

This course introduces operating systems concepts for the OS/2 operating system. Topics include hardware management, file and memory management, system configuration/ optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a OS/2 environment.

CIS 147 Operating System - Windows   2 2 3

Prerequisites: None   Corequisites: CIS 130

This course introduces operating systems concepts for a Windows operating system. Topics include hardware management, file and memory management, system configuration/ optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a Windows environment.

CIS 148   Operating System- Windows NT   2 2 3

Prerequisites: None   Corequisites: CIS 130

This course introduces operating systems concepts for the Windows NT operating system. Topics include hardware management, file and memory management, system configuration/optimization, networking options, and utilities. Upon completion, students should be able to perform operating system functions at the single/multi-user support level in a Windows NT environment.

CIS 149   Operating System - MVS   2 2 3

Prerequisites: None   Corequisites: CIS 130

This course introduces operating systems concepts for MVS operating systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, Job Control Language, and support functions. Upon completion, students should be able to perform operating system functions at the support level in an MVS environment.

CIS 152 Database Concepts & Apps 2 2 3

Prerequisites: CIS 110, CIS 111, or CIS 115

Corequisites: None

This course introduces database design and creation using a DBMS product. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptable design practices.

CIS 153 Database Applications 2 2 3

Prerequisites: CIS 152 Corequisites:None

This course covers advanced database functions continued from CIS 152. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements.

CIS 154 Database Utilization 1 2 2

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces basic database functions and uses. Emphasis is placed on database manipulation with queries, reports, forms, and some table creation. Upon completion, students should be able to enter and manipulate data from the end-user mode.

CIS 155 Database Theory/Analysis 2 2 3

Prerequisites: CIS 152 Corequisites: None

This course introduces database design theories and analysis. Emphasis is placed on data dictionaries, normalization, data integrity, and data modeling. Upon completion, students should be able to design normalized database structures which exhibit data integrity.

CIS 157 Database Programming I 2 2 3

Prerequisites: CIS 130 and CIS 152

Corequisites: None

This course is designed to develop programming proficiency in a selected DBMS. Emphasis is placed on the Data Definition Language (DDL) and Data Manipulation Language (DML) of the DBMS as well as on report generation. Upon completion, students should be able to write programs which create, update, and produce reports representative of industry requirements.

CIS 160 MM Resources Integration 2 2 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces the peripherals and attendant software needed to create stand-alone or networked interactive multimedia applications.

Emphasis is placed on using audio, video, graphic, and network resources; using peripheral-specific software; and understanding file formats. Upon completion, students should be able to utilize multimedia peripherals to create various sound and visual files to create a multimedia application.

CIS 161 DTP Proofreading & Editing 2 0 2

Prerequisites: None Corequisites: None

This course covers the fundamentals of on-screen proofreading and editing. Emphasis is placed on the on-screen procedures and skills needed for controlling the accuracy and quality of text. Upon completion, students should be able to proofread and correct on-screen the appearance, format, accuracy, and content of documents.

CIS 162 MM Presentation Software 2 2 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course is designed to integrate visual and audio resources using presentation software in a simple interactive multimedia project. Emphasis is placed upon design and audience considerations, general prototyping, and handling of media resources. Upon completion, students should be able to demonstrate an original interactive multimedia presentation implementing all of these resources in a professional manner.

CIS 163 Prog Interfaces Internet 2 2 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course creates interactive multimedia applications and applets for the Internet using web-specific languages. Emphasis is placed on audio, video, graphic, and network resources and various file formats. Upon completion, students should be able create an interactive multimedia application or applet for the Internet.

CIS 164 DTP Layout & Design 2 2 3

Prerequisites: None Corequisites: None

This course introduces the fundamentals of design and page layout. Emphasis is placed on page layout organization, typography, and color. Upon completion, students should be able to create projects that visually enhance communication.

CIS 165 Desktop Publishing I 2 2 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course provides an introduction to desktop publishing software capabilities. Emphasis is placed on efficient use of a page layout software package to create, design, and print publications; hardware/software compatibility; and integration of specialized peripherals. Upon completion, students should be able to prepare publications given design specifications.

CIS 166   Desktop Publishing II   2 2 3

Prerequisites: CIS 165   Corequisites: None

This course provides advanced training in the use of a variety of desktop publishing software. Emphasis is placed on evaluation of software and hardware available for desktop publishing. Upon completion, students should be able to create and design complex publications using a variety of page layout software.

CIS 168   Desktop Presentations   1 2 2

Prerequisites: CIS 166   Corequisites: None

This course provides advanced training in desktop publications and projects designed for business presentations. Emphasis is placed on the most appropriate software package or packages to complete simulated or 'live' business projects. Upon completion, students should be able to create and manage presentations using various microcomputer software programs.

CIS 169   Business Presentations   1 2 2

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course provides hands-on experience with a graphics presentation package. Topics include terminology, effective chart usage, design and layout, integrating hardware components, and enhancing presentations with text and graphics. Upon completion, students should be able to design and demonstrate an effective presentation.

CIS 170   Tech Support Functions I 2 2 3

Prerequisites: CIS 115   Corequisites:None

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Emphasis is placed on technical support management techniques and support technologies. Upon completion, students should be able to determine the best technologies to support and solve actual technical support problems.

CIS 172   Intro to the Internet   2 3 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces the various navigational tools and services of the Internet. Topics include using Internet protocols, search engines, file compression/decompression, FTP, e-mail, listservers, and other related topics. Upon completion, students should be able to use Internet resources, retrieve/decompress files, and use e-mail, FTP, and other Internet tools.

CIS 173   Network Theory   2 2 3

Prerequisites: None   Corequisites: None

This course examines Token Ring, Ethernet, and Arcnet networks. Topics include LAN topologies and design; cable characteristics; cable, interface cards, server, and client installation; basic

management techniques; linking networks; and troubleshooting LAN problems. Upon completion, students should be able to install both hardware and software for a small client/server LAN and troubleshoot common network problems. This course will be centered around fundamental operating system knowledge and hardware / software skills.

CIS 174   Network System Manager I 2 2 3

Prerequisites: CIS 130 and CIS 173

Corequisites: None

This course covers effective network management. Topics include network file system design and security, login scripts and user menus, printing services, e-mail, and backup. Upon completion, students should be able to administer an office network system.

CIS 175   Network Management I   2 2 3

Prerequisites: CIS 130 and CIS 173

Corequisites: None

This course covers fundamental network administration and system management. Topics include accessing and configuring basic network services, managing directory services, and using network management software. Upon completion, students should be able to apply system administrator skills in developing a network management strategy.

CIS 182   Printing on the Network 2 2 3

Prerequisites: CIS 174 or CIS 175

Corequisites: None

This course focuses on effective management of printing on a network. Topics include installation, configuration, and management of print servers and print queues, remote printer setup, and customizing print jobs. Upon completion, students should be able to implement and troubleshoot network printing.

CIS 184   TCP/IP and NFS   2 2 3

Prerequisites: CIS 175 and CIS 282

Corequisites: None

This course focuses on installation and configuration of TCP/IP on a network. Topics include an overview of TCP/IP, SNMP, application of programming interfaces, Network File System (NFS), IP addresses, and routing and tunneling. Upon completion, students should be able to install, monitor, manage, diagnose, and troubleshoot common problems in IP networks and internetworks.

CIS 215   Hardware Install/Maint 2 3 3

Prerequisites: CIS 110, CIS 111 OR CIS 115

Corequisites: None

This course covers the basic hardware of a personal computer, including operations and interactions with software. Topics include

component identification, the memory system, peripheral installation and configuration, preventive maintenance, and diagnostics and repair. Upon completion, students should be able to select appropriate computer equipment, upgrade and maintain existing equipment, and troubleshoot and repair non-functioning personal computers.

CIS 216   Software Install/Maint   1   2   2

Prerequisites: CIS 130   Corequisites: None

This course introduces the installation and troubleshooting aspects of personal computer software. Emphasis is placed on initial installation and optimization of system software, commercial programs, system configuration files, and device drivers. Upon completion, students should be able to install, upgrade, uninstall, optimize, and troubleshoot personal computer software.

CIS 217   Computer Train & Support   2   2   3

Prerequisites: None   Corequisites: None

This course introduces computer training and support techniques. Topics include methods of adult learning, training design, delivery, and evaluation, creating documentation, and user support methods. Upon completion, students should be able to design and implement training and provide continued support for computer users.

CIS 218   Introduction to AI   3   0   3

Prerequisites: CIS 130   Corequisites: None

This course introduces artificial intelligence. Emphasis is placed on expert systems. Upon completion, students should be able to discuss the basic concepts and procedures in the development of artificial intelligence systems.

CIS 219 Adv PC App Development   2   3   3

Prerequisites: CIS 116 Corequisites: None

This course provides an advanced study of the principles of application development and end-user interface design principles. Emphasis is placed on advanced arrays/tables, file management, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design and program a PC application at the advanced level.

CIS 220   Spreadsheets II   1   2   2

Prerequisites: CIS 120   Corequisites: None

This course covers advanced spreadsheet design and development. Topics include advanced functions, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets.

CIS 226   Trends in Technology   1   2   2

Prerequisites: None   Corequisites: None

This course introduces emerging information systems technologies. Emphasis is placed on evolving technologies and trends in business and industry. Upon completion, students should be able to articulate an understanding of the current trends and issues in emerging technologies for information systems.

CIS 227   Microcomputer Sys Analysis 2   2   3

Prerequisites: CIS 115 and CIS 144, 145, 146, 147, 148, or 149

Corequisites: None

This course covers use of a systems approach to planning and implementing business information systems in a microcomputer environment. Emphasis is placed on end-user applications, rather than centralized MIS, and development of strong analytical skills. Upon completion, students should be able to apply analytical and problem-solving skills to resolve typical microcomputer systems planning and implementation issues.

CIS 228   Project Manager   1   2   2

Prerequisites: CIS 130   Corequisites: None

This course introduces computerized project management software. Topics include identifying critical paths, cost management, time management, and problem solving. Upon completion, students should be able to plan a complete project and project time and costs accurately.

CIS 244   Operating System - AS/400   2   3   3

Prerequisites: CIS 110 and CIS 130

Corequisites: None

This course includes operating systems concepts for AS/400 systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, Job Control Language, and support functions. Upon completion, students should be able to perform operating system functions in an AS/400 environment.

CIS 245 Operating System - Multi-User 2   3   3

Prerequisites: CIS 110   Corequisites: None

This course includes operating systems concepts for multi-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating system functions in a multi-user environment.

CIS 246   Operating System - UNIX 2   3   3

Prerequisites: CIS 110 and CIS 130

Corequisites: None

This course includes operating systems concepts for UNIX operating systems. Topics include hardware management, file and memory

management, system configuration/optimization, utilities, and other related topics. Upon completion, students should be able to effectively use the UNIX operating system and its utilities.

CIS 247 Operating System - DOS/VSE 2 3 3

Prerequisites: None   Corequisites: None

This course includes operating systems concepts for DOS/VSE operating systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, Job Control Language, and support functions. Upon completion, students should be able to perform operating system functions in a DOS/VSE environment.

CIS 256   Database Analysis & Design 3 0 3

Prerequisites: CIS 115   Corequisites: None

This course is an exploration of the established and evolving methodologies for the analysis, design, and development of a database system. Emphasis is placed on business systems characteristics, managing information systems projects, prototyping, CASE tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CIS 260   Business Graphics Apps 2 2 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course utilizes graphics software in a variety of business applications. Topics include terminology, design and evaluation, graphics formats and conversion, practical applications of graphics software, and integration of peripherals. Upon completion, students should be able to create and incorporate graphic designs to enhance business communications.

CIS 266   Multimedia Design   2 2 3

Prerequisites: CIS 160 and CIS 162

Corequisites: None

This course prototypes a complete interactive multimedia project using an authoring package. Topics include mapping hyperlinks, advanced design concepts, appropriate evaluation techniques, and user/customer considerations. Upon completion, students should be able to present a complete prototyped project which will be used in advanced courses.

CIS 267   Multimedia Applications 2 2 3

Prerequisites: CIS 260   Corequisites:None

This course combines audio, video, text, and graphics technologies to create multimedia applications. Emphasis is placed on digitizing audio; compressing and digitizing video; and using animation, special effects, and technical media to enhance communication. Upon completion, students should be able to produce effective multimedia presentations for a variety of settings, including business, education, and training.

CIS 268   Multimedia Project   2 2 3

Prerequisites: CIS 266   Corequisites: None

This course provides an opportunity to complete a significant multimedia project with minimal instructor support. Emphasis is placed on written and verbal communication skills, documentation, presentation, and user training. Upon completion, students should be able to present an operational multimedia system which they have created.

CIS 274   Network System Manager II 2 2 3

Prerequisites: CIS 174   Corequisites:None

This course is a continuation of CIS 174 focusing on advanced network management, configuration, and installation. Emphasis is placed on server configuration files, startup procedures, server protocol support, memory and performance concepts, and management and maintenance. Upon completion, students should be able to install and upgrade networks and servers for optimal performance.

CIS 275   Network Management II 2 2 3

Prerequisites: CIS 175   Corequisites:None

This course is a continuation of CIS 175 focusing on advanced enterprise networks. Topics include directory service tree planning, management distribution and protection, improving network security, auditing the network, printing, networking, and system administration of an Internet node. Upon completion, students should be able to manage client services and network features and optimize network performance.

CIS 276   Helpdesk Analysis & Design 3 0 3

Prerequisites: CIS 115   Corequisites: None

This course examines established and evolving methodologies for the analysis, design, and development of a helpdesk system. Emphasis is placed on business systems characteristics, managing information systems projects, prototyping, CASE tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CIS 277   Network Design & Imp 2 2 3

Prerequisites: CIS 275   Corequisites: None

This course focuses on the design, analysis, and integration of a network operating system. Topics include determination of a directory tree structure and object placement, creation of time synchronization strategy, security, and routing services. Upon completion, students should be able to implement a network design strategy, develop a migration strategy, and create a network implementation schedule.

CIS 279   UNIX System Admin   3 3 4

Prerequisites: CIS 246   Corequisites:None

This course provides an advanced study of the UNIX operating system for maintaining UNIX systems. Topics include administering user accounts, using back-up utilities, installing and maintaining UNIX file systems, configuring devices, controlling processes, using advanced scripts, and other related topics. Upon completion, students should be able to set up, configure, maintain, and administer a UNIX system.

CIS 282   Network Technology   3 0 3

Prerequisites: CIS 174 or CIS 175

Corequisites: None

This course examines concepts of network architecture. Topics include various network types, topologies, transmission methods, media and access control, the OSI model, and the protocols which operate at each level of the model. Upon completion, students should be able to design a network based on the requirements of a company.

CIS 286   Systems Analysis & Design   3 0 3

Prerequisites: CIS 115   Corequisites:None

This course examines established and evolving methodologies for the analysis, design, and development of a business information system. Emphasis is placed on business systems characteristics, managing information systems projects, prototyping, CASE tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CIS 287   Network Support   2 2 3

Prerequisites: CIS 274 or CIS 275

Corequisites: None

This course provides experience using CD ROM and on-line research tools and hands-on experience for advanced hardware support and troubleshooting. Emphasis is placed on troubleshooting network adapter cards and cabling, network storage devices, the DOS workstation, and network printing. Upon completion, students should be able to analyze, diagnose, research, and fix network hardware problems.

CIS 288   Systems Project   1 4 3

Prerequisites: CIS 227 or CIS 286

Corequisites: None

This course provides an opportunity to complete a significant systems project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion,

students should be able to complete a project from the definition phase through implementation.

CIS 289   Operations Project   2 2 3

Prerequisites: CSC 135 and CIS 247

Corequisites: None

This course provides an opportunity to complete a significant operations project from the design phase through implementation of a business computer application. Emphasis is placed on the use of VSE/Power (Tm) commands, JCL for tape and VSAM files, and responding to system console messages using vendor manuals. Upon completion, students should be able to complete a multiple-job sequenced project including JCL, commands, data, and operator responses.

CIS 296 Seminar in Information Systems 0 3 1

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

CARDIOVASCULAR/VASCULAR INTERVENTIONAL TECHNOLOGY

CIT 211   Patient Care   3 0 0 3

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course introduces specialized patient care and management, physiological monitoring, and general procedural considerations used within the vascular and cardiovascular environment. Emphasis is placed on patient communication, pressure measurements, ECG, specialized cardiac monitoring, intravenous therapy, sterile technique, infection control, and isolation procedures. Upon completion, students should be able to understand patient care and management and the use and function of physiological monitoring and measurement devices.

CIT 212   Angio Equip & Supplies   3 0 0 3

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course covers the specialized equipment and instrumentation, digital subtraction, and magnification image enhancement techniques used in the cardiovascular/vascular environment. Emphasis is placed on Cine cameras, automatic film changers, intensifying screens, principles of digital imaging, automatic pressure injectors, subtraction, magnification, catheters, guide wires,

and needles. Upon completion, students should be able to understand principles and use of angiographic equipment and specialized imaging techniques used in the cardiovascular/vascular environment.

CIT 213 Radiographic Pharmacology 3 0 0 3

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course is designed to cover medications, contrast media, and emergency complications in the cardiovascular/vascular interventional environment. Emphasis is placed on indications, administration, and adverse reactions to medications and contrast media. Upon completion, students should be able to identify and understand medications and contrast agents in cardiovascular/interventional environments and their desired results.

CIT 214   Vascular Imaging I   3 0 0 3

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course covers angiographic approaches, interventional procedures, anatomy, and imaging techniques for the peripheral, splanchnic, and renal systems. Emphasis is placed on the structure and hemodynamics of the vascular systems, filming procedures, patient positioning and tube angulations, basic pathology, and interventional devices. Upon completion, students should be able to demonstrate knowledge of each of the vascular systems and methods used to visualize this anatomy radiographically.

CIT 224   Vascular Imaging II   3 0 0 3

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course covers angiographic approaches, interventional procedures, anatomy, and imaging techniques for the pulmonary, cardiovascular, and cerebral systems. Emphasis is placed on the structure and hemodynamics of the vascular systems, filming procedures, patient positioning and tube angulations, basic pathology, and interventional devices. Upon completion, students should be able to demonstrate knowledge of each of the vascular systems and methods used to visualize this anatomy radiographically.

CIT 230   CIT Clinical Practicum I 0 0 21 7

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course provides the opportunity to apply knowledge gained from didactic instruction to the cardiovascular/vascular interventional clinical environment. Emphasis is placed on patient care and positioning, imaging procedures, and image

production in angiography within the cardiovascular/vascular interventional environment. Upon completion, students should be able to assume a variety of duties and responsibilities in the cardiovascular/vascular interventional environment.

CIT 240   CIT Clinical Practicum II 0 0 21 7

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course provides the opportunity to apply knowledge gained from didactic instruction to the cardiovascular/vascular interventional clinical environment. Emphasis is placed on patient care and positioning, imaging procedures, and image production in angiography within the cardiovascular/vascular interventional environment. Upon completion, students should be able to assume a variety of duties and responsibilities in the cardiovascular/vascular interventional environment.

CIT 250 CIT Clinical Practicum III 0 0 24 8

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course provides the opportunity to apply knowledge gained from didactic instruction to the cardiovascular/vascular interventional clinical environment. Emphasis is placed on patient care and positioning, imaging procedures, and image production in angiography within the cardiovascular/vascular interventional environment. Upon completion, students should be able to assume a variety of duties and responsibilities in the cardiovascular/vascular interventional environment.

CIT 260   CIT Topics   2 0 0 2

Prerequisites: Enrollment in the Cardiovascular/Vascular Interventional Technology program   Corequisites: None

This course integrates aspects of cardiovascular/interventional technology as practiced in the didactic and clinical settings. Emphasis is placed on content specifications of the ARRT Advanced-Level exam, study skills, and simulated examinations. Upon completion, students should be able to demonstrate an understanding of the topics presented for successful completion of the CIT exam.

CRIMINAL JUSTICE

CJC 111   Intro to Criminal Justice 3 0 3

Prerequisites: None   Corequisites: None

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon

completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options.

CJC 112   Criminology   3 0 3

Prerequisites: None   Corequisites: None

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

CJC 113   Juvenile Justice   3 0 3

Prerequisites: None   Corequisites: None

This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.

CJC 131   Criminal Law   3 0 3

Prerequisites: None   Corequisites: None

This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC 132 Court Procedure & Evidence 3 0 3

Prerequisites: None   Corequisites: None

This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

CJC 141   Corrections   3 0 3

Prerequisites: None   Corequisites: None

This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system.

CJC 198   Seminar in Criminal Justice 3 0 3

Prerequisites: Enrollment in the program

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions. Course content will include instruction in the basic methodology necessary for doing pertinent research in the areas of criminal justice and the law.

CJC 211   Counseling   3 0 3

Prerequisites: None   Corequisites: None

This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

CJC 212   Ethics & Comm Relations 3 0 3

Prerequisites: None   Corequisites: None

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

CJC 214   Victimology   3 0 3

Prerequisites: None   Corequisites: None

This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs.

CJC 215 Organization & Administration 3 03

Prerequisites: None   Corequisites: None

This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice

system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

CJC 221   Investigative Principles   3 2 4

Prerequisites: None   Corequisites: None

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

CJC 222   Criminalistics   3 0 3

Prerequisites: None   Corequisites: None

This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

CJC 231   Constitutional Law   3 0 3

Prerequisites: None   Corequisites: None

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

CJC 232   Civil Liability   3 0 3

Prerequisites: None   Corequisites: None

This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues.

CJC 233   Correctional Law   3 0 3

Prerequisites: None   Corequisites: None

This course introduces statutory/case law pertinent to correctional concepts, facilities, and

related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.

CJC 241 Community-Based Corrections 3 0 3

Prerequisites: None   Corequisites: None

This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

CJC 251   Forensic Chemistry I   3 2 4

Prerequisites: None   Corequisites: None

This course provides a study of the fundamental concepts of chemistry as it relates to forensic science. Topics include physical and chemical properties of substances, metric measurements, chemical changes, elements, compounds, gases, and atomic structure. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of forensic chemistry.

CJC 252   Forensic Chemistry II   3 2 4

Prerequisites: CJC 251   Corequisites: None

This course provides a study of specialized areas of chemistry specifically related to forensic science. Topics include properties of light, emission and absorption spectra, spectrophotometry, gas and liquid chromatography, and related topics in organic and biochemistry. Upon completion, students should be able to demonstrate an understanding of specialized concepts in forensic chemistry.

CJC 293   Selected Topics in
                       Criminal Justice   3 0 3

Prerequisites: Enrollment in the program

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study. Topics will focus on the portrayal of criminal justice issues in the mass media.

COOPERATIVE EDUCATION

COE 110   World of Work   1 0 0 1

Prerequisites: None   Corequisites: None

This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

COE 111   Co-op Work Experience I 0 0 10 1

Prerequisites: Enrollment in the program

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. Enrollment in the course will be by permission of the department chair and will require a 2.0 cumulative GPA.

COE 115   Work Exp Seminar I   1 0 0 1

Prerequisites: None   Corequisites: COE 111

This course utilizes case presentation, film observation and characteristic behaviors of each level of development and to derive guidelines for promoting desirable behaviors and coping with undesirable behaviors in young children. Experiences will provide opportunities to develop observations skills, effective techniques and beginning skill adapting to the needs of individual children.

COE 121 Co-op Work Experience II 0 0 10 1

Prerequisites: COE 111   Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

COE 125   Work Exp Seminar II   1 0 0 1

Prerequisites: None   Corequisites: COE 121

This course provides for individual and group exploration of activities and materials useful for developing useful learning experiences for preschool children involving manipulation, experimentation and discovery. Students will be encouraged to develop their skill repertories through shared discussion of their activity implementation.

COE 131 Co-op Work Experience III 0 0 10 1

Prerequisites: COE 111 and COE 121

Corequisites: None

This course provides work experience with a

college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

COE 135   Work Exp Seminar III   1 0 0 1

Prerequisites: COE 115 and COE 125

Corequisites: COE 131

This course involves extensive discussion of practices in directing preschool activities. Emphasis will be placed on planning activities that are age and situation appropriate and students will be encouraged to utilize all their relevant work experiences in contributing to the seminar.

COMPUTER SCIENCE

CSC 120   Computing Fundamentals I 3 2 4

Prerequisites: MAT 080 or MAT 090

Corequisites: None

This course provides the essential foundation for the discipline of computing and a program of study in computer science, including the role of the professional. Topics include algorithm design, data abstraction, searching and sorting algorithms, and procedural programming techniques. Upon completion, students should be able to solve problems, develop algorithms, specify data types, perform sorts and searches, and use an operating system.

CSC 129   Technical Programming   2 3 3

Prerequisites: None   Corequisites: None

This course introduces the analysis of technical problems by using different software tools. Emphasis is placed on solving technical problems using structured programming logic and tools such as a computer language, spreadsheet software, or an advanced programmable calculator. Upon completion, students should be able to derive solutions to complex technical problems using various software tools.

CSC 130 Computing Fundamentals II 3 2 4

Prerequisites: CSC 120 Corequisites:None

This course provides in-depth coverage of the discipline of computing and the role of the professional. Topics include software design methodologies, analysis of algorithm and data structures, searching and sorting algorithms, and file organization methods. Upon completion, students should be able to use software design methodologies and choice of data structures and understand social/ethical responsibilities of the computing professional.

CSC 131   Assembly Programming 2 3 3

Prerequisites: None Corequisites: None

This course introduces assembly language programming with emphasis on program efficiency. Topics include registers, instruction, data types, memory layout, I/O, bit manipulation, debugging, and code considerations. Upon completion, students should be able to create and modify program modules written in an assembly language.

CSC 132   BASIC Programming . 2 3 3

Prerequisites: None Corequisites: None

This course is designed to introduce computer programming using the BASIC programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug BASIC language programs.

CSC 133   C Programming   2 3 3

Prerequisites: None Corequisites: None

This course introduces computer programming using the C programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays tables, pointers, and other related topics. Upon completion, students should be able to design, code, test, and debug C language programs.

CSC 134   C++ Programming   2 3 3

Prerequisites: CIS 110 or CIS 111 and CIS 115

Corequisites: None

This course introduces object-oriented computer programming using the C++ programming language. Topics include input/output operations, iteration, arithmetic operations, arrays, pointers, filters, and other related topics. Upon completion, students should be able to design, code, test, and debug C++ language programs.

CSC 135   COBOL Programming 2 3 3

Prerequisites: CIS 110 or CIS 111 and CIS 115

Corequisites: None

This course introduces computer programming using the COBOL programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug COBOL language programs.

CSC 136 FORTRAN Programming 2 3 3

Prerequisites: None Corequisites: None

This course introduces computer programming using the FORTRAN programming language. Topics include input/output operations, sequence,

selection, iteration, arithmetic operations, arrays, subprograms, and other related topics. Upon completion, students should be able to design, code, test, and debug FORTRAN language programs.

CSC 137   Pascal Programming   2 3 3

Prerequisites: None Corequisites: None .

This course introduces structured computer programming using the Pascal programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Pascal language programs.

CSC 138   RPG Programming   2 3 3

Prerequisites: None   Corequisites: None

This course introduces computer programming using the RPG programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug RPG language programs.

CSC 139 Visual BASIC Programming 2 3 3

Prerequisites: CIS 110 or CIS 111 and CIS 115

Corequisites: None

This course introduces event-driven computer programming using the Visual BASIC programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, forms, sequential files, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual BASIC language programs.

CSC 140   Visual C Programming 2 3 3

Prerequisites: None   Corequisites: None

This course introduces event-driven computer programming using the Visual C programming languages. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual C language programs.

CSC 141   Visual C++ Programming 2 3 3

Prerequisites: None Corequisites: None

This course introduces event-driven computer programming using the Visual C++ programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual C++ language programs.

CSC 142 Visual COBOL Programming 2 3 3

Prerequisites: None   Corequisites: None

This course introduces computer programming using the Visual COBOL programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual COBOL language programs.

CSC 143   Object-Oriented Prog   2 3 3

Prerequisites: CIS 110 or CIS 111 and CIS 115

Corequisites: None

This course introduces the concepts of object-oriented programming. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, test, debug, and implement objects at the application level using the appropriate environment.

CSC 145   Visual C/C++ Programming 2 3 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces event-driven programming concepts using the Visual C/C++ and similar programming languages. Topics include forms, data types, classes, inheritance, event handling, standard and bitwise operators, functions. arrays, pointers, files, and other related topics. Upon completion, students should be able to solve problems related to engineering applications by writing and modifying Visual C/C++ language programs.

CSC 150 Visual RPG Programming 2 3 3

Prerequisites: None   Corequisites:CIS 130

This course introduces computer programming using the Visual RPG programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual RPG language programs.

CSC 152   SAS   3 2 4

Prerequisites: CIS 130   Corequisites: None

This course introduces the fundamentals of SAS programming. Emphasis is placed on learning basic SAS commands and statements for solving a variety of data processing applications. Upon completion, students should be able to use SAS data and procedure steps to create SAS data sets, do statistical analysis, and general customized reports.

CSC 230   Analysis of Algorithms   3 2 4

Prerequisites: CSC 130   Corequisites: None

This course covers the design and analysis of algorithms including the concurrency and parallel processing. Topics include non-procedural programming paradigms contrasted with procedural programming, search strategies, and artificial intelligence concepts, including the design and implementation of a multi-faceted software system. Upon completion, students should be able to apply software engineering principles with analysis and design criteria and understand social responsibilities and professional ethics.

CSC 235   Advanced COBOL   2 3 3

Prerequisites: CSC 135   Corequisites: None

This course is a continuation of CSC 135 using COBOL with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 237   Advanced Pascal   2 3 3

Prerequisites: CSC 137   Corequisites: None

This course is a continuation of CSC 137 using Pascal with structured programming principles. Emphasis is placed on advanced arrays, file management/processing techniques, data structures, sub-programs, interactive processing, algorithms, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 238   Advanced RPG   2 3 3

Prerequisites: CSC 138   Corequisites:None

This course is a continuation of CSC 138 using RPG with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 239   Advanced Visual BASIC 2 3 3

Prerequisites: CSC 139   Corequisites: None

This course is a continuation of CSC 139 using Visual BASIC with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 240   Advanced Visual C   2 3 3

Prerequisites: CSC 140   Corequisites: None

This course is a continuation of CSC 140 using Visual C with structured programming principles. Emphasis is placed on advanced arrays, file management/processing techniques, data structures, functions, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 241   Advanced Visual C++   2 3 3

Prerequisites: CSC 141   Corequisites: None

This course is a continuation of CSC 141 using Visual C++ with object-oriented programming principles. Emphasis is placed on advanced arrays, file management/processing techniques, data structures, sub-programs, interactive processing, algorithms, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 242   Advanced Visual COBOL 2 3 3

Prerequisites: CSC 142   Corequisites: None

This course is a continuation of CSC 142 using Visual COBOL with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

CSC 245   Adv C/C++ Programming 2 3 3

Prerequisites: CSC 133, CSC 134, CSC 140, CSC 141, or CSC 145

Corequisites: None

This course covers additional operations using C dialects primarily relating to operating system interfacing. Topics include advanced file handling, Interprocess Communications, messages, semaphores, inter-language calls, signals, device drivers, sockets, and client/server techniques. Upon completion, students should be able to write and modify programs using advanced functions.

CSC 246   Realtime Programming   2 3 3

Prerequisites: A high-level or assembly programming language   Corequisites: None

This course covers the techniques for programming in a realtime environment. Topics include signals, critical sections, polling, interface devices, timing, open and closed loop control, speed/size optimization, and special considerations for embedded controllers. Upon completion, students should be able to write and modify interface routines used with time-critical applications.

CSC 247   Adv Assembly Language 2 3 3

Prerequisites: CSC 131   Corequisites: None

This course covers additional techniques used in efficient assembly language programs. Topics include memory models, re-entrant code, recursion, ROM-able code, disassembly, patching, device drivers, and interfacing to high-level languages. Upon completion, students should be able to create, patch, and optimize sub-programs for use in solving problems.

CSC 248   Adv Internet Progr   2 3 3

Prerequisites: CSC 134 or CSC 140 or CSC 141

Corequisites: None

This course covers advanced programming skills required to design Internet applications. Emphasis is placed on programming techniques required to support network applications. Upon completion, students should be able to design, code, debug, and document network-based programming solutions to various real-world problems using an appropriate programming language.

CSC 250   Advanced Visual RPG   2 3 3

Prerequisites: CSC 150   Corequisites: None

This course is a continuation of CSC 150 using Visual RPG with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions to various problems using an appropriate editor/translator.

CSC 260   Prog in Another Language 2 2 3

Prerequisites: CSC 120   Corequisites: None

This course provides in-depth coverage, with applications, of a programming language which was not covered in CSC 120, 130, 220, or 230. Emphasis is placed on using the covered language to develop well-structured programs to solve appropriate problems. Upon completion, students should be able to understand the uses, syntax, and limitations of the language while comparing similarities and differences with other languages.

CSC 298 Seminar in Programming   2 3 3

Prerequisites: Enrollment in the program

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

DESIGN DRAFTING

DDF 211   Design Drafting I   2 6 4

Prerequisites: DFT 112   Corequisites: None

This course emphasizes design processes for finished products. Topics include data collection from manuals and handbooks, efficient use of materials, design sketching, specifications, and vendor selection. Upon completion, students should be able to research and plan the design process for a finished product.

DDF 212   Design Drafting II   1 6 4

Prerequisites: DDF 211   Corequisites: None

This course stresses the integration of various drafting and design practices. Emphasis is placed on the creation of an original design. Upon completion, students should be able to apply drafting and design procedures to a design project of their choosing.

DDF 213   Design Drafting III   1 6 4

Prerequisites: DDF 212   Corequisites: None

This course provides an opportunity to produce all the documentation needed to complete a project for the manufacture of a product. Topics include materials, manufacturing processes, analysis, production drawings, calculations, and specifications. Upon completion, students should be able to research and produce all information needed to complete a project for manufacture.

DDF 214   Tool Design   2 4 4

Prerequisites: DDF 212   Corequisites: None

This course introduces the principles of tool design. Topics including gauging, die work, and cost analysis using available catalogs and studies using manufacturing processes. Upon completion, students should be able to use catalogs to identify vendors and prepare working drawings for tooling.

DRAFTING

DFT 111   Technical Drafting I   2 6 4

Prerequisites: None   Corequisites: None

This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices. A portion of the class time will be devoted to computer-aided drafting.

DFT 112   Technical Drafting II   2 6 4

Prerequisites: DFT 111   Corequisites: None

This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings. A portion of the class time will be devoted to computer-aided drafting.

DFT 119   Basic CAD   1 2 2

Prerequisites: None   Corequisites: None

This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

DFT 121   Intro to GD & T   1 2 2

Prerequisites: None   Corequisites: None

This course introduces basic geometric dimensioning and tolerancing principles. Topics include symbols, annotation, theory, and applications. Upon completion, students should be able to interpret and apply basic geometric dimensioning and tolerancing principles to drawings.

DFT 151   CAD I   2 3 3

Prerequisites: None   Corequisites: None

This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

DFT 152   CAD II   2 3 3

Prerequisites: DFT 151   Corequisites: None

This course is a continuation of DFT 151. Topics include advanced two-dimensional, three-dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents.

DFT 153   CAD III   2 3 3

Prerequisites: DFT 151   Corequisites: None

This course covers basic principles of three-dimensional CAD wireframe and surface models. Topics include user coordinate systems, three-dimensional viewpoints, three-dimensional wireframes, and surface components and viewpoints. Upon completion, students should be able to create and manipulate three-dimensional wireframe and surface models.

DIESEL MECHANICS

DIE 110   Diesel Engines   3 9 6

Prerequisites: None   Corequisites: None

This course introduces theory, design, terminology, and operating adjustments for diesel engines. Emphasis is placed on safety, theory of operation, inspection, measuring, and rebuilding diesel engines according to factory specifications. Upon completion, students should be able to measure, diagnose problems, and repair diesel engines.

DIE 112   Diesel Electrical Sys   3 6 5

Prerequisites: None   Corequisites: None

This course introduces electrical theory and applications as they relate to diesel powered equipment. Topics include lighting, accessories, safety, starting, charging, instrumentation, and gauges. Upon completion, students should be able to follow schematics to identify, repair, and test electrical circuits and components.

DIE 114   Power Trains   3 6 5

Prerequisites: None   Corequisites: None

This course introduces power transmission devices. Topics include function and operation of gears, chains, clutches, planetary gears, drive lines, differentials, and transmissions. Upon completion, students should be able to identify, research specifications, repair, and adjust power train components.

DIE 115   Electronic Engines   2 3 3

Prerequisites: None   Corequisites: None

This course introduces the principles of electronically controlled diesel engines. Emphasis is placed on testing and adjusting diesel engines in accordance with manufacturers' specifications. Upon completion, students should be able to diagnose, test, and calibrate electronically controlled diesel engines.

DIE 116   Air Cond/Diesel Equip   1 2 2

Prerequisites: None   Corequisites: None

This course provides a study of the design, theory, and operation of heating and air conditioning systems in newer models of medium and heavy duty vehicles. Topics include component function, refrigerant recovery, and environmental regulations. Upon completion, students should be able to use proper techniques and equipment to diagnose and repair heating/air conditioning systems according to industry standards.

DIE 119 Mechanical Transmissions 2 2 3

Prerequisites: None   Corequisites: None

This course introduces the operating principles of mechanical medium and heavy duty truck transmissions. Topics include multiple counter shafts, power take-offs, sliding idler clutches, and friction clutches. Upon completion, students should be able to diagnose, inspect, and repair mechanical transmissions.

DIE 125   Preventive Maintenance 1 3 2

Prerequisites: None   Corequisites: None

This course introduces preventive maintenance practices used on medium and heavy duty vehicles and rolling assemblies. Topics include preventive maintenance schedules, services, DOT rules and regulations, and roadability. Upon completion, students should be able to set up and follow a preventive maintenance schedule as directed by manufacturers.

DIE 230   Air Brakes   1 2 2

Prerequisites: None   Corequisites: None

This course introduces the operation and design of air braking systems used on trucks. Topics include safety, governors, compressors, and supporting systems. Upon completion, students should be able to diagnose, disassemble, inspect, repair, and reassemble air brake systems.

DIE 233   Suspension and Steering 2 4 4

Prerequisites: None   Corequisites: None

This course introduces the theory and principles of medium and heavy duty steering and suspension systems. Topics include wheel and tire problems, frame members, fifth wheel, bearings, and coupling systems. Upon completion, students should be able to troubleshoot, adjust, and repair suspension and steering components on medium and heavy duty vehicles.

ECONOMICS

ECO 151* Survey of Economics   3 0 3

Prerequisites: None   Corequisites: None

This course introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government spending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors.

ECO 251* Prin of Microeconomics 3 0 3

Prerequisites: None   Corequisites: None

This course introduces economic analysis of individual, business, and industry choices in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives.

ECO 252* Prin of Macroeconomics 3 0 3

Prerequisites: None   Corequisites: None

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals.

EDUCATION

EDU 111   Early Childhood Cred I   2 0 2

Prerequisites: None   Corequisites: None

This course introduces early childhood education and the role of the teacher in environments that encourage exploration and learning. Topics include professionalism, child growth and development, individuality, family, and culture. Upon completion, students should be able to identify and demonstrate knowledge of professional roles, major areas of child growth and development, and diverse families.

EDU 112   Early Childhood Cred II 2 0 2

Prerequisites: None   Corequisites: None

This course introduces developmentally appropriate practices, positive guidance, and standards of health, safety, and nutrition. Topics include the learning environment, planning developmentally appropriate activities, positive guidance techniques, and health, safety, and nutrition standards. Upon completion, students should be able to demonstrate developmentally appropriate activities and positive guidance techniques and describe health/sanitation/nutrition practices that promote healthy environments for children.

EDU 113   Family/Early Child Cred 2 0 2

Prerequisites: None   Corequisites: None

This course covers business/professional practices for family early childhood providers, developmentally appropriate practices, positive guidance, and methods of providing a safe and healthy environment. Topics include developmentally appropriate practices; health, safety and nutrition; and business and professionalism. Upon completion, students should be able to develop a handbook of policies, procedures, and practices for a family child care home.

EDU 119   Early Childhood Ed   3 2 4

Prerequisites: None   Corequisites: None

This course covers the foundations of the education profession, types of programs, professionalism, and planning quality programs for children. Topics include historical foundations, career options, types of programs, professionalism, observational skills, and planning developmentally appropriate schedules, environments, and activities for children. Upon completion, students should be able to demonstrate observational skills, identify appropriate schedules and environments, develop activity plans, and describe influences on the profession.

EDU 131   Child, Family, & Commun 3 0 3

Prerequisites: EDU 119 or EDU 144

Corequisites: None

This course covers the relationships between the families, programs for children/schools, and the community. Emphasis is placed on establishing and maintaining positive collaborative relationships with families and community resources. Upon completion, students should be able to demonstrate strategies for effectively working with diverse families and identifying and utilizing community resources.

EDU 144   Child Development I   3 0 3

Prerequisites: None   Corequisites: None

This course covers the theories of child development and the developmental sequences of children from conception through the pre-school years for early childhood educators. Emphasis is placed on sequences in physical/motor, social, emotional, cognitive, and language development and appropriate experiences for the young child. Upon completion, students should be able to identify developmental milestones, plan experiences to enhance development, and describe appropriate interaction techniques and environments for typical/atypical development.

EDU 145   Child Development II   3 0 3

Prerequisites: EDU 144   Corequisites: None

This course covers theories of child development and developmental sequences of children from pre-school through middle childhood for early childhood educators. Emphasis is placed on characteristics of physical/motor, social, emotional, and cognitive/language development and appropriate experiences for children. Upon completion, students should be able to identify developmental characteristics, plan experiences to enhance development, and describe appropriate interaction techniques and environments.

EDU 146   Child Guidance   3 0 3

Prerequisites: None   Corequisites: None

This course introduces practical principles and techniques for developmentally appropriate guidance. Emphasis is placed on encouraging self-esteem and cultural awareness, effective communication skills, and direct and indirect guidance techniques and strategies. Upon completion, students should be able to demonstrate strategies which encourage positive social interactions, promote conflict resolution, and develop self-control, self-motivation, and self-esteem in children.

EDU 151   Creative Activities   3 0 3

Prerequisites: EDU 119 or EDU 144

Corequisites: None

This course covers creative learning environments, planning and implementing developmentally appropriate experiences, and developing appropriate teaching materials for the classroom. Emphasis is placed on creative

activities for children in art, music, movement and physical skills, and dramatics. Upon completion, students should be able to select and evaluate developmentally appropriate learning materials and activities. Students will be expected to furnish some materials required for this class.

EDU 153   Health, Safety, & Nutrit   3 0 3

Prerequisites: None   Corequisites: None

This course focuses on promoting and maintaining the health and well-being of children. Topics include health and nutritional needs, safe and healthy environments, and recognition and reporting of child abuse and neglect. Upon completion, students should be able to set up and monitor safe indoor and outdoor environments and implement a nutrition education program.

EDU 171   Instructional Media   1 2 2

Prerequisites: EDU 119, EDU 144 and COE 111

Corequisites: None

This courses covers the development and maintenance of effective teaching materials and the operation of selected pieces of equipment. Topics include available community resources, various types of instructional materials and bulletin boards, and audiovisual and computer use with children. Upon completion, students should be able to construct and identify resources for instructional materials and bulletin boards and use audiovisual and computer equipment. Students will be expected to furnish some materials required for this class.

EDU 185   Cognitive & Lang Act   3 0 3

Prerequisites: EDU 145   Corequisites: None

This course covers methods of developing cognitive and language/communication skills in children. Emphasis is placed on planning the basic components of language and cognitive processes in developing curriculum activities. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum activities.

EDU 221   Children with Sp Needs   3 0 3

Prerequisites: EDU 144 and EDU 145

Corequisites: None

This course introduces working with children with special needs. Emphasis is placed on the characteristics and assessment of children and strategies for adapting the home and classroom environment. Upon completion, students should be able to recognize atypical development, make appropriate referrals, and work collaboratively to plan, implement, and evaluate inclusion strategies.

EDU 234   Infants, Toddlers, & Twos   3 0 3

Prerequisites: EDU 111 or EDU 144

Corequisites: None

This course covers the skills needed to effectively implement group care for infants, toddlers, and two-year olds. Emphasis is placed on child development and developmentally appropriate practices. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate a developmentally appropriate curriculum.

EDU 252   Math & Sci Activities   3 0 3

Prerequisites: EDU 151 and EDU 185

Corequisites: None

This course introduces discovery experiences in math and science. Topics include concepts, facts, phenomena, and skills in each area. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum materials.

EDU 259   Curriculum Planning   3 0 3

Prerequisites: EDU 112, or EDU 119

Corequisites: COE 131 and COE 135

This course covers early childhood curriculum planning. Topics include philosophy, curriculum, indoor and outdoor environmental design, scheduling, observation and assessment, and instructional planning and evaluation. Upon completion, students should be able to assess children and curriculum; plan for daily, weekly, and long-range instruction; and design environments with appropriate equipment and supplies.

EDU 261   Early Childhood Admin I   2 0 2

Prerequisites: EDU 112 or EDU 119

Corequisites: None

This course covers the policies, procedures, and responsibilities for the management of early childhood education programs. Topics include implementation of goals, principles of supervision, budgeting and financial management, and meeting the standards for a NC Child Day Care license. Upon completion, students should be able to develop program goals, explain licensing standards, determine budgeting needs, and describe effective methods of personnel supervision. Registration for the course by successful completion of practicums or permission of department chair.

EDU 282   Early Childhood Lit   3 0 3

Prerequisites: EDU 185   Corequisites: None

This course covers the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history

and selection of developmentally appropriate children's literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques.

EDU 288   Adv Issues/Early Child Ed   2 0 2

Prerequisites: EDU 112, EDU 113 or EDU 119

Corequisites: None

This course covers advanced topics and issues in early childhood. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education.

ENGLISH AS A FOREIGN LANGUAGE

EFL 091   Composition I   5 0 5

Prerequisites: None   Corequisites: None

This course introduces basic sentence structure and writing paragraphs. Emphasis is placed on word order, verb tense-aspect system, auxiliaries, word forms, and simple organization and basic transitions in writing paragraphs. Upon completion, students should be able to demonstrate a basic understanding of grammar and ability to write English paragraphs using appropriate vocabulary, organization, and transitions.

ENGINEERING

EGR 131   Intro To Electronics Tech   1 2 2

Prerequisites: None   Corequisites: None

This course introduces the basic skills required for electrical/electronics technicians. Topics include soldering/desoldering, safety practices, test equipment, scientific calculators, AWG wire table, the resistor color code, electronic devices, problem solving, and use of hand tools. Upon completion, students should be able to solder/desolder, operate test equipment, apply problem-solving techniques, and use a scientific calculator.

EGR 285   Design Project   0 4 2

Prerequisites: None   Corequisites: None

This course provides the opportunity to design and construct an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, construction, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate operational projects.

ELECTRICITY

ELC 111   Intro to Electricity   2 2 3

Prerequisites: None   Corequisites: None

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronic majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

ELC 112   DC/AC Electricity   3 6 5

Prerequisites: None   Corequisites: None

This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

ELC 113   Basic Wiring I   2 6 4

Prerequisites: None   Corequisites: None

This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with basic electrical installations.

ELC 114   Basic Wiring II   2 6 4

Prerequisites: ELC 113   Corequisites: None

This course provides additional instruction in the application of electrical tools, materials, and test equipment associated with electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with electrical installations.

ELC 115   Industrial Wiring   2 6 4

Prerequisites: ELC 113   Corequisites: None

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

ELC 117   Motors and Controls   2 6 4

Prerequisites: ELC 112 or ELC 131

Corequisites: None

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC 118   National Electrical Code 1 2 2

Prerequisites: None   Corequisites: None

This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

ELC 128   Intro to PLC   2 3 3

Prerequisites: None   Corequisites: None

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs.

ELC 131   DC/AC Circuit Analysis   4 3 5

Prerequisites: None   Corequisites: MAT 121

This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

ELC 140   Fund of DC/AC Circuit 5 6 7

Prerequisites: None   Corequisites: None

This course covers the principles of DC/AC circuit analysis as applied to electronics. Topics include atomic theory, circuit analysis, components, test equipment, troubleshooting techniques, schematics, diagrams, and other related topics. Upon completion, students should be able to interpret, construct, verify, analyze, and troubleshoot DC/AC circuits in a safe manner.

ELECTRONICS

ELN 112   Diesel Electronics System 2 6 4

Prerequisites: None   Corequisites: None

This course introduces electronic theory and applications as used in medium and heavy duty vehicles. Emphasis is placed on the basic function and operation of semiconductor and integrated circuits. Upon completion, students should be able to identify electronic components, explain their use and function, and use meters and flow charts to diagnose and repair systems.

ELN 131   Electronic Devices   3 3 4

Prerequisites: ELC 112, ELC 131, or ELC 140

Corequisites: None

This course includes semiconductor-based devices such as diodes, bipolar transistors, FETs, thermistors, and related components . Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment.

ELN 132   Linear IC Applications   3 3 4

Prerequisites: ELN 131 or BMT 113

Corequisites: None

This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, differential amplifiers, instrumentation amplifiers, waveform generators, active filters, PLLs, and IC voltage regulators. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment.

ELN 133   Digital Electronics   3 3 4

Prerequisites: ELN 111, ELC 112, ELC 131,

or ELC 140   Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC converters, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

ELN 140   Semiconductor Devices   4 6 6

Prerequisites: None   Corequisites: None

This course covers semiconductor devices and circuits as they apply to the area of electronic servicing. Topics include semiconductor theory, diodes, transistors, linear integrated circuits, biasing, amplifiers, power supplies, and other related topics. Upon completion, students should be able to construct, verify, analyze, and troubleshoot semiconductor circuits.

ELN 141   Digital Fundamentals   4 6 6

Prerequisites: None   Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, logic elements, Boolean algebra, Demorgan's theorem, logic families, flip flops, registers,

counters, and other related topics. Upon completion, students should be able to analyze, verify, and troubleshoot digital circuits.=

ELN 142   Video Systems   7 9 10

Prerequisites: ELN 140   Corequisites: None

This course provides a detailed study of the operation and repair of television, VCR, and other video systems. Topics include the operation, alignment, and repair of video systems. Upon completion, students should be able to troubleshoot, maintain, and repair video systems.

ELN 229   Industrial Electronics   2 4 4

Prerequisites: ELC 112, ELC 131, or ELC 140

Corequisites: None

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices (filters, rectifiers, FET, SCR, Diac, Triac, Op-amps, etc). Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit.

ELN 231   Industrial Controls   2 3 3

Prerequisites: ELC 112, ELC 131, or ELC 140

Corequisites: None

This course introduces the fundamental concepts of solid-state control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret ladder diagrams and demonstrate an understanding of electromechanical and electronic control of rotating machinery.

ELN 232   Intro to Microprocessors 3 3 4

Prerequisites: ELN 133   Corequisites: None

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment.

ELN 233   Microprocessor Systems 3 3 4

Prerequisites: ELN 232   Corequisites: None

This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct,

program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuits using related equipment.

ELN 237   Local Area Networks   2 3 3

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces the fundamentals of local area networks and their operation in business and computer environments. Topics include the characteristics of network topologies, system hardware (repeaters, bridges, routers, gateways), system configuration, and installation and administration of the LAN. Upon completion, students should be able to install, maintain, and manage a local area network.

ELN 238   Advanced LANs   2 3 3

Prerequisites: ELN 237   Corequisites: None

This course covers advanced concepts, tools, and techniques associated with servers, workstations, and overall local area network performance. Topics include network security and configuration, system performance and optimization, communication protocols and packet formats, troubleshooting techniques, multi-platform integration, and other related topics. Upon completion, students should be able to use advanced techniques to install, manage, and troubleshoot networks and optimize server and workstation performance.

ELN 241   Consumer Electronics   4 6 6

Prerequisites: ELC 140   Corequisites:ELN 140

This course covers the installation, maintenance, troubleshooting, and repair of consumer electronic products. Topics include the theory, operation, and maintenance of audio systems and personal communications equipment. Upon completion, students should be able to maintain, troubleshoot, and repair consumer electronic products.

ELN 243   Communication Electronics 2 3 3

Prerequisites: ELC 140   Corequisites: ELN 140

This course covers the installation, maintenance, troubleshooting, and repair of electronic communications equipment. Topics include the theory, operation, and maintenance of electronic communications equipment. Upon completion, students should be able to maintain, troubleshoot, and repair electronic communications equipment.

ENGLISH

ENG 060   Speaking English Well   2 0 2

Prerequisites: None   Corequisites: None

This course is designed to improve conversational skills. Emphasis is placed on practice using fluent standard spoken English. Upon completion, students should be able to converse comfortably in a variety of situations.

ENG 070   Basic Language Skills   2 2 3

Prerequisites: None   Corequisites: None

This course introduces the fundamentals of standard written English. Emphasis is placed on effective word choice, recognition of sentences and sentence parts, and basic usage. Upon completion, students should be able to generate a variety of sentence types that clearly express ideas.

ENG 080   Writing Foundations   3 2 4

Prerequisites: ENG 070 or ENG 075

Corequisites: None

This course introduces the writing process and stresses effective sentences. Emphasis is placed on applying the conventions of written English, reflecting standard usage and mechanics in structuring a variety of sentences. Upon completion, students should be able to write correct sentences and a unified, coherent paragraph.

ENG 085   Reading & Writing Found 5 0 5

Prerequisites: ENG 070 and RED 070; or

ENG 075   Corequisites: None

This course uses whole language to develop proficiency in reading and writing for college. Emphasis is placed on applying analytical and critical reading skills to a variety of texts and on introducing the writing process. Upon completion, students should be able to recognize and use various patterns of text organization and compose effective paragraphs.

ENG 085A Reading & Writing

Found Lab   0 2 1

Prerequisites: ENG 070 and RED 070; or

ENG 075   Corequisites: ENG 085

This laboratory provides the opportunity to practice the skills introduced in ENG 085. Emphasis is placed on practical skills for applying analytical and critical reading skills to a variety of texts and on the writing process. Upon completion, students should be able to apply those skills in the production of effective paragraphs.

ENG 090   Composition Strategies   3 0 3

Prerequisites: ENG 080 or ENG 085

Corequisites: None

This course provides practice in the writing process and stresses effective paragraphs. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay.

ENG 090A   Comp Strategies Lab   0 2 1

Prerequisites: ENG 080 or ENG 085

Corequisites: ENG 090

This writing lab is designed to practice the skills introduced in ENG 090. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay.

ENG 095   Reading & Comp Strategies 5 0 5

Prerequisites: ENG 080 and RED 080; or

ENG 085   Corequisites: None

This course uses whole language to strengthen proficiency in reading and writing for college. Emphasis is placed on applying critical reading skills to narrative and expository texts and on using the writing process. Upon completion, students should be able to comprehend, analyze, and evaluate college texts and to compose essays in preparation for college writing.

ENG 095A Reading & Comp Strat Lab 0 2 1

Prerequisites: ENG 080 and RED 080; or

ENG 085   Corequisites: ENG 095

This laboratory provides the opportunity to practice the skills introduced in ENG 095. Emphasis is placed on practical skills for applying critical reading skills to narrative and expository texts and on the writing process. Upon completion, students should be able to apply those skills in the production of effective essays in preparation for college writing.

ENG 101   Applied Communications I 3 0 3

Prerequisites: None   Corequisites: None

This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace.

ENG 111* Expository Writing   3 0 3

Prerequisites: ENG 090 and RED 090; or

ENG 095   Corequisites: None

This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. The course will include a unit introducing the research process.

ENG 111A Expository Writing Lab 0 2 1

Prerequisites: ENG 090 and RED 090; or

ENG 095   Corequisites: ENG 111

This writing laboratory is designed to apply the skills introduced in ENG 111. Emphasis is placed on the editing and revision components of the writing process. Upon completion, students should be able to apply those skills in the production of final drafts in ENG 111.

ENG 112* Argument-Based Research   3 0 3

Prerequisites: ENG 111   Corequisites: None

This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing data and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style.

ENG 113* Literature-Based Research   3 0 3

Prerequisites: ENG 111 Corequisites: None

This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works.

ENG 114* Prof Research & Reporting 3 0 3

Prerequisites: ENG 111   Corequisites: None

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations.

ENG 115   Oral Communication   3 0 3

Prerequisites: None   Corequisites: None

This course introduces the basic principles of oral communication in both small group and public settings. Emphasis is placed on the components of the communication process, group decision-making, and public address. Upon completion, students should be able to demonstrate the principles of effective oral communication in small group and public settings.

ENG 125   Creative Writing I   3 0 3

Prerequisites: ENG 111

Corequisites: ENG 112, ENG 113, or ENG 114

This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others.

ENG 131* Introduction to Literature 3 0 3

Prerequisites: ENG 111

Corequisites: ENG 112, ENG 113, or ENG 114

This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature.

ENG 231* American Literature I   3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

ENG 232* American Literature II   3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

ENG 241* British Literature I   . 3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

ENG 242* British Literature II   3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

ENG 262* World Literature II   3   0   3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works.

ENG 273 African-American Literature 3   0   3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts.

GRAPHIC ARTS

GRA 110   Graphic Arts Orientation 2   0   2

Prerequisites: None   Corequisites: None

This course covers the history, development, and commercial applications of the major printing processes. Topics include offset lithography, screen printing, intaglio, relief printing, and emerging technologies. Upon completion, students should be able to demonstrate an understanding of the major characteristics, advantages, and disadvantages of each process.

GRA 112   Graphics Problem Solving   2   0   2

Prerequisites: None   Corequisites: None

This course covers computations used in graphic arts production. Topics include measurement systems, ratios and scaling, and paper-cutting calculations. Upon completion, students should be able to apply mathematical skills to problem solving in graphic arts and imaging production.

GRA 121   Graphic Arts I   2   4   4

Prerequisites: None   Corequisites: None

This course introduces terminology, tools and materials, procedures, and equipment used in graphic arts production. Topics include copy preparation and pre-press production relative to printing. Upon completion, students should be able to demonstrate an understanding of graphic arts production.

GRA 151   Computer Graphics I   1   3   2

Prerequisites: None   Corequisites: None

This course introduces the use of hardware and software for production and design in graphic arts. Topics include graphical user interface and current industry uses such as design, layout,

typography, illustration, and imaging for production. Upon completion, students should be able to understand and use the computer as a fundamental design and production tool.

GRA 152   Computer Graphics II   1   3   2

Prerequisites: GRA 151   Corequisites: None

This course covers advanced design and layout concepts utilizing illustration, page layout, and imaging software in graphic arts. Emphasis is placed on enhancing and developing the skills that were introduced in GRA 151. Upon completion, students should be able to select and utilize appropriate software for design and layout solutions.

GRA 221   Graphic Arts II   2   4   4

Prerequisites: GRA 121 and GRA 151

Corequisites: None

This course is a continuation of GRA 121. Topics include multi-color image preparation, pre-press production, control of close/hairline register in image assembly and press operation, and post-press procedures. Upon completion, students should be able to demonstrate competence in all phases of graphic arts production.

GRA 255   Image Manipulation I   1   3   2

Prerequisites: GRA 151 or GRD 151

Corequisites: None

This course covers applications associated with electronic image manipulation, including color correction, color separation, special effects, and image conversion. Topics include image-capturing hardware, image-processing software, and output options. Upon completion, students should be able to utilize hardware and software to acquire, manipulate, and output images to satisfy design and production.

GRA 256   Image Manipulation II   1   3   2

Prerequisites: GRA 255   Corequisites: None

This course covers electronic color separation and its relationship to multi-color printing. Topics include color theory, separation, color matching, proofing, and output of process and spot color images. Upon completion, students should be able to use hardware and image processing software to produce color separations and proofs for various printing processes.

GRAPHIC DESIGN

GRD 141   Graphic Design I   2   4   4

Prerequisites: None   Corequisites: None

This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects.

HEALTH CARE TECHNOLOGY

HCT 101   Health Care Technology   6 2 6 9

Prerequisites: High school diploma or GED and currently listed as NA I with State of North Carolina   Corequisites: None

This course covers the basic skills necessary for employment as a multi-skilled health care worker. Topics include skills necessary for listing as a Nursing Assistant II, basic clerical and dietary functions, communication, medical terminology, and quality control principles. Upon completion, students should be able to perform a variety of skills and assist licensed health care providers.

HCT 102 Basic Phlebotomy and EKG 1 2 3 3

Prerequisites: None   Corequisites: HCT 101

This course covers the basic skills necessary for performing venipuncture, drawing blood specimens, and performing basic 12-lead electrocardiograms. Topics include venipuncture and finger stick techniques, requirements for common specimen collection, and obtaining as 12-lead EKG. Upon completion, students should be able to perform phlebotomy and EKG skills.

HCT 103 Environmental Maintenance 1 2 3 3

Prerequisites: None   Corequisites: HCT 101

This course covers the principles of maintaining a safe the therapeutic environment in a health care agency. Topics include quality control, set up and operation of common medical equipment, and necessary housekeeping and maintenance functions at the unit level. Upon completion, students should be able to manage materials and equipment and perform housekeeping and maintenance functions common to health care agencies.

HCT 104   Restorative Care   .   1 2 3 3

Prerequisites: None   Corequisites: HCT 101

This course covers the principles of move, gait, and restoration of function. Topics include range of motion across the life span, improving gait and the ability to transfer, and the use of common assistive devices. Upon completion, students should be able to assist with implementing a plan of care for strengthening muscles, improving mobility, and facilitating transfer.

HCT 105   Basic Respiratory Skills   1 2 3 3

Prerequisites: None   Corequisites: HCT 101

This course covers the basics of oxygenation and ventilation and principles of common therapy to improve oxygenation and ventilation. Topics include common diagnostic procedures and therapeutic modalities used in respiratory care. Upon completion, students should be able to set up and maintain oxygen, perform peak flow diagnostic tests, collect sputum specimens.

HISTORY

HIS 121*   Western Civilization I   3 0 3

Prerequisites: None   Corequisites: None

This course introduces western civilization from pre-history to the early modern era. Topics include ancient Greece, Rome, and Christian institutions of the Middle Ages and the emergence of national monarchies in western Europe. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early western civilization.

HIS 122*   Western Civilization II   3 0 3

Prerequisites: None   Corequisites: None

This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern western civilization.

HIS 131*   American History I   3 0 3

Prerequisites: None   Corequisites: None

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history.

HIS 132*   American History II   3 0 3

Prerequisites: None   Corequisites: None

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War.

HORTICULTURE

HOR 112   Landscape Design I   2 3 3

Prerequisites: HOR 160 and HOR 260

Corequisites: None

This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization. Upon completion, students should be able to read, plan, and draft a landscape design.

HOR 114   Landscape Construction 2 2 3

Prerequisites: None   Corequisites: None

This course introduces the design and fabrication of landscape structures/features. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features.

HOR 116   Landscape Management   2 2 3

Prerequisites: None   Corequisites: None

This course covers information and skills necessary to analyze a property and develop a management schedule. Emphasis is placed on property measurement, plant condition, analysis of client needs, and plant culture needs. Upon completion, students should be able to analyze a property, develop management schedules, and implement practices based on client needs.

HOR 118   Equipment Op & Maint   1 3 2

Prerequisites: None   Corequisites: None

This course covers the proper operation and maintenance of selected equipment used in horticulture. Emphasis is placed on the maintenance, minor repairs, safety devices, and actual operation of selected equipment. Upon completion, students should be able to design a maintenance schedule, service equipment, and demonstrate safe operation of selected equipment.

HOR 124   Nursery Operations   2 3 3

Prerequisites: None   Corequisites: None

This course covers nursery site and crop selection, cultural practices, and production and marketing methods. Topics include site considerations, water availability, equipment, irrigation, fertilization, containers, media, and pest control. Upon completion, students should be able to design and implement a nursery operation and grow and harvest nursery crops.

HOR 142   Fruit & Vegetable Prod   1 2 2

Prerequisites: None   Corequisites: None

This course introduces the principles and techniques of growing fruits and field-grown vegetables. Topics include site selection, proper varietal selection, nutritional values, cultural techniques, harvesting and marketing, and insect and disease control. Upon completion, students should be able to demonstrate an understanding of the principles related to the production of selected fruits and vegetables.

HOR 160   Plant Materials I   2 2 3

Prerequisites: None   Corequisites: None

This course covers identification, culture, characteristics, and use of plants. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, and landscape applications. Upon completion, students should be able to

demonstrate knowledge of the proper selection and utilization of plant materials.

HOR 162   Applied Plant Science   2 2 3

Prerequisites: None   Corequisites: None

This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

HOR 164   Hort Pest Management   2 2 3

Prerequisites: None   Corequisites: None

This course covers the identification and control of plant pests including insects, diseases, and weeds. Topics include pest identification and chemical regulations, safety, and pesticide application. Upon completion, students should be able to meet the requirements for North Carolina Commercial Pesticide Ground Applicators license.

HOR 166   Soils & Fertilizers   2 2 3

Prerequisites: None   Corequisites: None

This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation, classification, physical and chemical properties, testing, fertilizer application, and other amendments. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media.

HOR 168   Plant Propagation   2 2 3

Prerequisites: None   Corequisites: None

This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micro-propagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.

HOR 170   Hort Computer Apps   1 3 2

Prerequisites: None   Corequisites: None

This course introduces computer programs as they apply to the horticulture industry. Emphasis is placed on applications of software for plant identification, design, and irrigation. Upon completion, students should be able to use computer programs in horticultural situations.

HOR 213   Landscape Design II   2 2 3

Prerequisites: HOR 112   Corequisites: None

This course covers residential and commercial landscape design, cost analysis, and installation. Emphasis is placed on job cost estimates, installation of the landscape design, and maintenance techniques. Upon completion, students should be able to read landscape design

blueprints, develop cost estimates, and implement the design.

HOR 235   Greenhouse Production   2   2   3

Prerequisites: None   Corequisites: None

This course covers the production of greenhouse crops. Emphasis is placed on product selection and production based on market needs and facility availability, including record keeping. Upon completion, students should be able to select and make production schedules to successfully produce greenhouse crops.

HOR 251   Insects & Diseases   2   2   3

Prerequisites: None   Corequisites: None

This course introduces insects and diseases of economic importance to horticultural crops. Topics include insect life cycles and identifying characteristics; plant diseases, including their signs and symptoms; control methods; and insect scouting for IPM. Upon completion, students should be able to demonstrate an understanding of insect and disease identification, collection, and control.

HOR 255   Interiorscapes   1   2   2

Prerequisites: None   Corequisites: None

This course covers plant selection, design, and management for interior settings. Topics include tropical plant identification, cultural requirements, insect and disease identification and control, and design and management requirements for interior plants. Upon completion, students should be able to design, install, and manage plants in interior settings.

HOR 260   Plant Materials II   2   2   3

Prerequisites: HOR 160   Corequisites: None

This course is a continuation of HOR 160 and covers additional plants. Emphasis is placed on reinforcement of skills and the introduction of additional plants. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

HOR 298   Seminar in
Landscape Construction   2   2   3

Prerequisites: Enrollment in the program and HOR 114   Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

HUMANITIES

HUM 110*Technology and Society   3   0   3

Prerequisites: None   Corequisites: None

This course considers technological change from historical, artistic, and philosophical perspectives

and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology.

HYDRAULICS

HYD 110   Hydraulics/Pneumatics I   2   3   3

Prerequisites: None   Corequisites: None

This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting.

HYD 112   Hydraulics/Med/Heavy Duty 1   2   2

Prerequisites: None   Corequisites: None

This course introduces hydraulic theory and applications as applied to mobile equipment. Topics include component studies such as pumps, motors, valves, cylinders, filters, reservoirs, lines, and fittings. Upon completion, students should be able to identify, diagnose, test, and repair hydraulic systems using schematics and technical manuals.

INDUSTRIAL SCIENCE

ISC 111   Quality Control   2   0   2

Prerequisites: None   Corequisites: None

This course provides training in inspection and gaging methods. Topics include special gage design, production gaging, and statistical process control concepts. Upon completion, students should be able to design and use custom gaging and apply statistical process control concepts.

ISC 112   Industrial Safety   2   0   2

Prerequisites: None   Corequisites: None

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment.

ISC 132   Mfg Quality Control   2   3   3

Prerequisites: None   Corequisites: None

This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

ISC 136   Productivity Analysis I   2   3   3

Prerequisites: None   Corequisites: None

This course covers modern methods of improving productivity. Topics include traditional motion economy, methods analysis, time standards, process analysis, cycle time management, and human factors/ergonomics. Upon completion, students should be able to demonstrate an understanding of productivity concepts and apply productivity improvement techniques to work situations.

ISC 151   Plant Layout   2 2 3

Prerequisites: None   Corequisites:None

This course provides a practical study of factory planning. Emphasis is placed on site selection and efficient arrangement of work areas to achieve lower manufacturing costs. Upon completion, students should be able to produce sample layouts of manufacturing operations.

MACHINING

MAC 111   Machining Technology I   2 12 6

Prerequisites: None   Corequisites:None

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

MAC 112   Machining Technology II 2 12 6

Prerequisites: MAC 111   Corequisites: None

This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

MAC 113   Machining Technology III 2 12 6

Prerequisites: MAC 112   Corequisites: None

This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified tolerances with special and advanced setups. Upon completion, students should be able to produce a part to specifications.

MAC 122   CNC Turning   1 3 2

Prerequisites: None   Corequisites: None

This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

MAC 124   CNC Milling   1 3 2

Prerequisites: None   Corequisites: None

This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

MAC 151   Machining Calculations   1 2 2

Prerequisites: None   Corequisites: None

This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations.

MAC 214   Machining Technology IV 2 12 6

Prerequisites: MAC 112   Corequisites: None

This course provides advanced applications and practical experience in the manufacturing of complex parts. Emphasis is placed on inspection, gauging, and the utilization of machine tools. Upon completion, students should be able to manufacture complex assemblies to specifications.

MAC 241   Jigs & Fixtures I   2 6 4

Prerequisites: MAC 112   Corequisites: None

This course introduces the application and use of jigs and fixtures. Emphasis is placed on design and manufacture of simple jigs and fixtures. Upon completion, students should be able to design and build simple jigs and fixtures.

MAC 247   Production Tooling   2 0 2

Prerequisites: MAC 111   Corequisites: None

This course provides advanced study in tooling currently utilized in the production of metal parts. Emphasis is placed on the proper use of tooling used on CNC and other production machine tools. Upon completion, students should be able to choose proper tool grades based on manufacturing requirements and troubleshoot carbide tooling problems.

MATHEMATICS

MAT 060   Essential Mathematics   3 2 4

Prerequisites: MAT 050   Corequisites: None

This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate.

MAT 070 Introductory Algebra   3 2 4

Prerequisites: MAT 060

Corequisites: RED 080 or ENG 085

This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

MAT 080 Intermediate Algebra   3 2 4

Prerequisites: MAT 070

Corequisites: RED 080 or ENG 085

This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational, radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

MAT 090 Accelerated Algebra   3 2 4

Prerequisites: MAT 060

Corequisites: RED 080 or ENG 085

This course covers algebraic concepts with emphasis on applications. Topics include those covered in MAT 070 and MAT 080. Upon completion, students should be able to apply algebraic concepts in problem solving using appropriate technology.

MAT 101 Applied Mathematics I   2 2 3

Prerequisites: MAT 060   Corequisites: None

This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study.

MAT 110 Mathematical Measurement 2 2 3

Prerequisites: MAT 070   Corequisites: None

This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data.

MAT 115 Mathematical Models   2 2 3

Prerequisites: MAT 070   Corequisites: None

This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics-intensive programs. Topics include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions and their groups, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently.

MAT 120 Geometry and Trigonometry 2 2 3

Prerequisites: MAT 070   Corequisites: None

This course introduces the concepts of plane trigonometry and geometry with emphasis on applications to problem solving. Topics include the basic definitions and properties of plane and solid geometry, area and volume, right triangle trigonometry, and oblique triangles. Upon completion, students should be able to solve applied problems both independently and collaboratively using technology.

MAT 121 Algebra/Trigonometry I   2 2 3

Prerequisites: MAT 070   Corequisites: None

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic, radical, exponential, and logarithmic functions; descriptive statistics; right triangle trigonometry; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems and analyze and communicate results.

MAT 122 Algebra/Trigonometry II 2 2 3

Prerequisites: MAT 121   Corequisites: None

This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, trigonometry, and systems of equations. Topics include translation and scaling of functions, sine law, cosine law, complex numbers, vectors, statistics, and systems of equations. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.

MAT 140* Survey of Mathematics   3 0 3

Prerequisites: MAT 070   Corequisites: None

This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology,

mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently.

MAT 151* Statistics I   3 0 3

Prerequisites: MAT 080 or MAT 090

Corequisites: None

This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data.

MAT 155* Statistical Analysis   3 0 3

Prerequisites: MAT 080 or MAT 090

Corequisites: MAT 155A

This course is an introduction to descriptive and inferential statistics. Topics include sampling, distributions, plotting data, central tendency, dispersion, central limits theorem, confidence intervals, hypothesis testing, correlations, regressions, and multinomial experiments. Upon completion, students should be able to describe data and test inferences about populations using sample data. A graphing calculator will be required in this course.

MAT 155A Statistics Analysis Lab 0 2 1

Prerequisites: MAT 080 or MAT 090

Corequisites: MAT 155

This course is a laboratory for MAT 155. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

MAT 161* College Algebra   3 0 3

Prerequisites: MAT 080 or MAT 090

Corequisites: None

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. A graphing calculator will be required in this course; enrollment more than twice by written permission of the department chair only.

MAT 162* College Trigonometry 3 0 3

Prerequisites: MAT 161   Corequisites: None

This course provides an integrated technological approach to trigonometry and its applications. Topics include trigonometric ratios, right triangles, oblique triangles, trigonometric functions, graphing, vectors, and complex numbers. Upon completion, students should be able to apply the above principles of trigonometry to problem solving and communication.

MAT 165* Finite Mathematics   3 0 3

Prerequisites: MAT 161   Corequisites: None

This course provides topics used to formulate models and to solve and interpret solutions using an algorithmic approach. Topics include linear algebra, linear programming, simplex method, sets and counting, probability, mathematics of finance, and logic. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts of finite mathematics and the ability to solve related problems.

MAT 171* Precalculus Algebra   3 0 3

Prerequisites: MAT 080 or MAT 090

Corequisites: None

This is the first of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions (linear, polynomial, rational), systems of equations and inequalities, and parametric equations. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and predictions. A graphing calculator will be required in this course; enrollment more than twice by written permission of the department chair only.

MAT 171A Precalculus Algebra Lab 0 2 1

Prerequisites: MAT 080 or MAT 090

Corequisites: MAT 171

This course is a laboratory for MAT 171. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

MAT 172* Precalculus Trigonometry 3 0 3

Prerequisites: MAT 171   Corequisites: None

This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, and vectors. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction.

MAT 172A   Precalculus Trig Lab   0 2 1

Prerequisites: MAT 171   Corequisites: MAT 172

This course is a laboratory for MAT 172. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

MAT 175* Precalculus   4 0 4

Prerequisites: High School Algebra III/Trigonometry   Corequisites: None

This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on functions and their graphs with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction.

MAT 175A   Precalculus Lab   0 2 1

Prerequisites: High School Algebra III/Trigonometry   Corequisites: MAT 175

This course is a laboratory for MAT 175. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

MAT 223   Applied Calculus   2 2 3

Prerequisites: MAT 122   Corequisites: None

This course provides an introduction to the calculus concepts of differentiation and integration by way of application and is designed for engineering technology students. Topics include limits, slope, derivatives, related rates, areas, integrals, and applications. Upon completion, students should be able to demonstrate an understanding of the use of calculus and technology to solve problems and to analyze and communicate results.

MAT 263*   Brief Calculus   3 0 3

Prerequisites: MAT 161   Corequisites: None

This course introduces concepts of differentiation and integration and their applications to solving problems; the course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results.

MAT 271*   Calculus I   3 2 4

Prerequisites: MAT 172 or MAT 175

Corequisites: None

This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions.

MAT 272*   Calculus II   3 2 4

Prerequisites: MAT 271   Corequisites: None

This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems.

MAT 273*   Calculus III   3 2 4

Prerequisites: MAT 272   Corequisites: None

This course covers the calculus of several variables and is third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables.

MAT 285   Differential Equations   1 2 2

Prerequisites: MAT 272   Corequisites: None

This course provides and introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher- order, and systems of differential equations;numerical methods ;series solutions;eigenvalues and eigenvectores;Laplace transforms; and Fourier series. Upon completion, student should be able to use differential equations to model physical phenomena, solve the equations and use the solutions to analyze the phenomena.

MECHANICAL

MEC 110   Intro to CAD/CAM   1 2 2

Prerequisites: None   Corequisites:None

This course introduces CAD/CAM. Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/CAM software to produce a CNC program.

MEC 111   Machine Processes I   2 3 3

Prerequisites: None   Corequisites: None

This course introduces safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include safety, measuring tools, and the basic setup and operation of lathes, milling machines, drill presses, and saws. Upon completion, students should be able to manufacture a simple part to a specified tolerance.

MEC 145   Mfg Materials I   2 3 3

Prerequisites: None   Corequisites: None

This course introduces a variety of manufacturing materials and common processing techniques. Emphasis is placed on the processing, testing, and application of materials such as wood, metals, plastics, ceramics, and composites. Upon completion, students should be able to demonstrate an understanding of fundamental engineering applications for a variety of materials, including their process capabilities and limitations.

MEC 161   Manufacturing Processes I 3 0 3

Prerequisites: None   Corequisites:None

This course provides the fundamental principles of processing materials into usable forms for the customer. Emphasis is placed on material forming, removal, and value-added processing provided to the customer by the manufacturers. Upon completion, students should be able to apply principles of traditional and non-traditional processing for metals and non-metals.

MEC 161A   Manufacturing Proc I Lab 0 3 1

Prerequisites: None   Corequisites: MEC 161

This course is a laboratory for MEC 161. Emphasis is placed on experiences that enhance the materials presented in MEC 161. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in MEC 161.

MEC 180   Engineering Materials   2 3 3

Prerequisites: None   Corequisites: None

This course covers the physical and mechanical properties of materials. Topics include testing, heat treating, ferrous and non-ferrous metals, plastics, composites, and material selection. Upon completion, students should be able to specify basic tests and properties and select appropriate materials on the basis of specific properties.

MEC 237   Control Systems   3 2 4

Prerequisites: MAT 122 and PHY 122

Corequisites: None

This course covers basic principles of control systems. Topics include the basic principles of electrical, electronic, and pneumatic control systems as related to industrial applications. Upon completion, students should be able to understand the design and function of circuits, motors, transducers, servomechanisms, and other devices. PHY 131 may be substituted for the PHY 122 prerequisite per the department chair of Manufacturing Engineering Technology.

MEC 251   Statics   2 2 3

Prerequisites: PHY 131 or PHY 151

Corequisites: None

This course covers the concepts and principles of statics. Topics include systems of forces and moments on structures in two- and three-dimensions in equilibrium. Upon completion, students should be able to analyze forces and moments on structures.

MEC 252   Strength of Materials   2 2 3

Prerequisites: MEC 251   Corequisites: None

This course covers the principles and concepts of stress analysis. Topics include centroids, moments of inertia, shear/mount diagrams, and stress and strain. Upon completion, students should be able to perform a stress and strain analysis on structural components.

MEC 280   Robotics and CIM   3 2 4

Prerequisites: MEC 237 and MEC 265 or

HYD 110   Corequisites: None

This course covers robotics and CIM. Topics include application, programming, and maintenance of robotic devices and the relationship between robotics and CIM. Upon completion, students should be able to safely program, operate, and maintain robots and understand the relationship between robotics and CIM.

MEDICAL ASSISTING

MED 110   Orientation to Med Assist 1 0 0 1

Prerequisites: None   Corequisites: None

This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

MED 116   Introduction to A & P   3 2 0 4

Prerequisites: Enrollment in the Medical Assisting program   Corequisites:None

This course introduces basic anatomy and physiology. Emphasis is placed on the relationship between body structure and function and the procedures common to health care. Upon completion, students should be able to identify body system components and functions

relating this knowledge to the delivery of health care.

MED 118 Medical Law and Ethics 2 0 0 2

Prerequisites: None   Corequisites: None

This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional.

MED 121 Medical Terminology I   3 0 0 3

Prerequisites: None   Corequisites: None

This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 122 Medical Terminology II   3 0 0 3

Prerequisites: MED 121   Corequisites:None

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED 130 Admin Office Proc I   1 2 0 2

Prerequisites: Enrollment in the Medical Assisting program   Corequisites: None

This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

MED 131 Admin Office Proc II   1 2 0 2

Prerequisites: MED 130   Corequisites: None

This course is the second in a series and provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel.

MED 134 Medical Transcription   2 2 0 3

Prerequisites: MED 121   Corequisites: None

This course provides the basic knowledge, understanding, and skills required to complete medical reports and transcribe medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to demonstrate competence in medical transcription.

MED 140 Exam Room Procedures I 3 4 0 5

Prerequisites: Enrollment in the Medical Assisting program   Corequisites: None

This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

MED 150 Laboratory Procedures I 3 4 0 5

Prerequisites: Enrollment in the Medical Assisting program   Corequisites: None

This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics.

MED 260 MED Clinical Externship 0 0 15 5

Prerequisites: Enrollment in the Medical Assisting program   Corequisites: None

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional.

MED 262 Clinical Perspectives   1 0 0 1

Prerequisites: Enrollment in the Medical Assisting program   Corequisites: None

This course is designed to explore personal and occupational responsibilities of the practicing medical assistant. Emphasis is placed on problems encountered during externships and development of problem-solving skills. Upon completion, students should be able to demonstrate courteous and diplomatic behavior when solving problems in the medical facility.

MED 272 Drug Therapy   3 0 0 3

Prerequisites: Enrollment in the Medical Assisting program and MED 140

Corequisites: None

This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of, and document the most commonly used medications in a physician's office.

MED 276   Patient Education   1 2 0 2

Prerequisites: Enrollment in the Medical Assisting program   Corequisites: None

This course is designed to provide communication skills, basic education principles, and knowledge of available community resources and to apply this knowledge to the clinical setting. Emphasis is placed on identifying appropriate community resources, developing patient education materials, and perfecting written and oral communication skills. Upon completion, students should be able to instruct, communicate effectively, and act as a liaison between the patient and community agencies.

MARKETING AND RETAILING

MKT 120   Principles of Marketing   3 0 3

Prerequisites: None   Corequisites:None

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

MKT 122   Visual Merchandising   3 0 3

Prerequisites: None   Corequisites:None

This course introduces basic layout design and commercial display in retail and service organizations. Topics include an analysis of display as a visual merchandising medium and an examination of the principles and applications of display and design. Upon completion, students should be able to plan, build, and evaluate designs and displays.

MKT 123   Fundamentals of Selling   3 0 3

Prerequisites: None   Corequisites:None

This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered.

MKT 220   Advertising and Sales Promotion

Prerequisites: None   Corequisites: None

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and

sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

MKT 225   Marketing Research   . 3 0 3

Prerequisites: MKT 120   Corequisites: None

This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results.

MKT 226   Retail Applications   3 0 3

Prerequisites: None   Corequisites:None

This course is designed to develop occupational competence through participation in case studies, group work, and simulations. Emphasis is placed on all aspects of store ownership and operation, including securing financial backing and a sufficient market share. Upon completion, students should be able to demonstrate an understanding of concepts covered through application.

MAGNETIC RESONANCE IMAGING

MRI 210   MRI Physics and
Equipment   3 0 0 3

Prerequisites: Enrollment in CT/MRI diploma

or MRI certificate programs   Corequisites:None

This course covers the physical principles of image formation, data acquisition, and image processing in magnetic resonance imaging. Emphasis is placed on instrumentation, fundamentals, pulse sequences, data manipulation, imaging parameters, options, and their effects on image quality. Upon completion, students should be able to understand the principles behind image formation, data acquisition, and image processing in magnetic resonance imaging.

MRI 211   MRI Procedures   4 0 0 4

Prerequisites: Enrollment in CT/MRI diploma

or MRI certificate programs   Corequisites:None

This course covers patient care, magnetic field safety, cross-sectional anatomy, contrast media, and scanning procedures in magnetic resonance imaging. Emphasis is placed on patient assessment and monitoring, safety precautions, contrast agents' use, methods of data acquisition, and identification of cross-sectional anatomy. Upon completion, students should be able to integrate all facets of imaging procedures in magnetic resonance imaging.

MRI 224   MRI Clinical Practicum   0 0 12 4

Prerequisites: Enrollment in CT/MRI diploma

or MRI certificate programs   Corequisites:None

This course provides experience in the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in magnetic resonance imaging. Upon completion, students should be able to assume a variety of duties and responsibilities within the magnetic resonance clinical environment.

MRI 227   MRI Clinical Practicum 0 0 21 7

Prerequisites: Enrollment in CT/MRI diploma

or MRI certificate programs   Corequisites:None

This course provides experience in the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in magnetic resonance imaging. Upon completion, students should be able to assume a variety of duties and responsibilities within the magnetic resonance clinical environment.

MUSIC

MUS 110*   Music Appreciation   3 0 3

Prerequisites: None   Corequisites: None

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music.

NETWORKING TECHNOLOGY

NET 110   Data Comm/Networking 2 2 3

Prerequisites: None   Corequisites: None

This course introduce data communication and networking. Topics include telecommunication standards, protocols, equipment, network topologies, communication software, LANs, WANs, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking.

NET 115   Telecom Fundamentals   1 2 2

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course covers the fundamentals of the electronic transfer of information for those who have not received credit for NET 110. Topics include terminal emulation software usage, file transfer methods, PC-based fax/modem/voice-mail operations, accessing and navigating the Internet, and bulletin boards. Upon completion, students should be able to access and use on-line services and the Internet, send and receive e-mail, and perform other basic telecommunication operations.

NET 120   Network Install/Admin I 2 2 3

Prerequisites: NET 110   Corequisites: None

This course covers the installation and administration of network hardware and system software. Topics include network topologies, various network operating systems, server and workstation installation and configuration, printer services, and connectivity options. Upon completion, students should be able to perform basic installation and administration of departmental networks.

NET 260   Internet Dev & Support   3 0 3

Prerequisites: NET 110   Corequisites: None

This course covers issues relating to the development and implementation of Internet related tools and services. Topics include Internet organization, site registration, e-mail servers, Web servers, Web page development, legal issues, firewalls, multimedia, TCP/IP, service providers, FTP, list servers, and gateways. Upon completion, students should be able to develop and support the Internet services needed within an organization.

NUCLEAR MEDICINE

NMT 110   Intro to Nuclear Med   2 0 0 2

Prerequisites: Enrollment in Nuclear Medicine program   Corequisites: None

This course provides a comprehensive introduction to the field of nuclear medicine. Topics include overview of school, program, and profession; medical terminology and ethics; medical legal issues; general patient care and radiation safety practices; and departmental organization. Upon completion, students should be able to utilize various learning resources and demonstrate understanding of radiation safety standards and ethical, professional conduct.

NMT 110A Intro to Nuclear Med Lab 0 3 0 1

Prerequisites: Enrollment in Nuclear Medicine program   Corequisites: NMT 110

This course is a laboratory to accompany NMT 110. Emphasis is placed on laboratory experiences that enhance material presented in NMT 110. Upon completion, students should be able to apply the laboratory experiences to the material presented in NMT 110.

NMT 126   Nuclear Physics   2 0 0 2

Prerequisites: NMT 110   Corequisites:None

This course introduces the fundamental principles of the physics that underlie nuclear medicine. Topics include atomic structure, electromagnetic and particulate radiation, decay schemes, production of radionuclides with emphasis on radionuclide generators, and decay calculations. Upon completion, students should be able to demonstrate an understanding of the physical concepts covered in the course.

NMT 132 Overview-Clinical Nuc Med 2 0 6 4

Prerequisites: NMT 110   Corequisites:None

This course is designed to familiarize students with the clinical practice of nuclear medicine. Emphasis is placed on the routine clinical procedures, radiopharmaceuticals and dosage, equipment manipulation, and basic patient care. Upon completion, students should be able to demonstrate integration of the principles covered in the classroom with the clinical experience.

NMT 134   Nuclear Pharmacy   2 0 0 2

Prerequisites: NMT 110   Corequisites:None

This course covers the formulation and application of radiopharmaceuticals. Topics include the preparation, handling, disposition, and quality control of clinically useful radiopharmaceuticals. Upon completion, students should be able to discuss the appropriate use and disposition of radiopharmaceuticals currently used in clinical nuclear medicine.

NMT 136   Health Physics   2 0 0 2

Prerequisites: NMT 110   Corequisites:None

This course covers the regulations and practices that ensure minimum exposure of patients, co-workers, and self to ionizing radiation. Topics include interactions of radiation with matter, protective practices, state and federal regulatory agencies and their directives, and methods of monitoring exposure. Upon completion, students should be able to demonstrate an understanding of the regulations and practices presented in the course.

NMT 211   NMT Clinical Practice I 0 0 21 7

Prerequisites: NMT 132   Corequisites:None

This course is one of two courses designed to provide clinical practice in nuclear medicine. Topics include radiation protection, radiopharmaceutical use, patient care, imaging procedures, non-imaging procedures, administrative procedures, and the therapeutic use of radionuclide. Upon completion, students should be able to demonstrate performance of the procedures covered in the course.

NMT 212   Proc for Nuclear Med I   2 0 0 2

Prerequisites: NMT 132   Corequisites:None

This course begins the in-depth study of clinical procedures performed by nuclear medicine technologists. Emphasis is placed on dose administration, use of instrumentation, computer applications, and normal and abnormal presentation. Upon completion, students should be able to demonstrate an understanding of the principles related to the procedures presented in the course.

NMT 212A   Proc for Nuc Med I Lab 0 3 0 1

Prerequisites: NMT 132   Corequisites:NMT 212

This course is a laboratory to accompany NMT 212. Emphasis is placed on experiences that enhance material presented in NMT 212. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in NMT 212.

NMT 214   Radiobiology   2 0 0 2

Prerequisites: NMT 132   Corequisites:None

This course covers the principles of radiation biology. Emphasis is placed on a system's sensitivity to radiation, radiation pathology, and the biological effects of radiation. Upon completion, students should be able to demonstrate an understanding of the effects of radiation in nuclear medicine.

NMT 215   Non-Imaging Instrumentation   1 3 0   2

Prerequisites: NMT 132   Corequisites:None

This course covers the proper operation of various types of non-imaging equipment used in nuclear medicine. Emphasis is placed on principles of radiation detection, quality control procedures, various counting problems, and machine-specific operating procedures. Upon completion, students should be able to demonstrate the proper use of the devices discussed in the course.

NMT 218   Computers in Nuc Med   2 0 0 2

Prerequisites: NMT 132   Corequisites:None

This course provides a general introduction to the operation of computers and the application of computers to the field of nuclear medicine. Topics include number systems, major system components, input/output devices, and acquisition and processing of nuclear medicine images. Upon completion, students should be able to demonstrate an understanding of the concepts presented.

NMT 221   NMT Clinical Practice II 0 0 21 7

Prerequisites: NMT 132   Corequisites:None

This course is one of two courses designed to provide clinical practice in nuclear medicine. Topics include radiation protection, radiopharmaceutical use, patient care, imaging procedures, non-imaging procedures, administrative procedures, and the therapeutic use of radionuclides. Upon completion, students should be able to demonstrate performance of the procedures covered in this course.

NMT 222   Proc for Nuclear Med II 2 0 0 2

Prerequisites: NMT 132   Corequisites: None

This course concludes the in-depth study of clinical procedures performed in nuclear medicine. Topics include method of dose administration, data acquisition parameters, computer use, and data patterns consistent with normal and described pathological states. Upon completion, students should be able to demonstrate an understanding of the principles related to the procedures discussed in the course.

NMT 222A Proc for Nuc Med II Lab 0 3 0 1

Prerequisites: NMT 132 Corequisites:NMT 222

This course is a laboratory to accompany NMT 222. Emphasis is placed on experiences that enhance material presented in NMT 222. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in NMT 222.

NMT 224 In Vitro Procedures   2 0 0 2

Prerequisites: NMT 132 Corequisites:None

This course introduces the area of in vitro nuclear medicine. Emphasis is placed on laboratory skills; selected aspects of chemistry, biochemistry, and immunology; procedures for common assays; and laboratory safety. Upon completion, students should be able to demonstrate an understanding of the concepts presented.

NMT 224A In Vitro Proc Lab   0 3 0 1

Prerequisites: NMT 132 Corequisites:NMT 224

This course is a laboratory to accompany NMT 224. Emphasis is placed on laboratory experiences that enhance material presented in NMT 224. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in NMT 224.

NMT 225 Imaging Instrumentation 1 3 0 2

Prerequisites: NMT 132 Corequisites: None

This course covers the operations of various imaging equipment used in nuclear medicine. Emphasis is placed on planar and SPECT gamma cameras. Upon completion, students should be able to safely operate and evaluate performance characteristics of the equipment discussed in the course.

NURSING

NUR 101 Practical Nursing I   7 6 6 11

Prerequisites: Enrollment in the Practical Nursing program Corequisites: None

This course introduces concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, legal/ethical/professional issues, wellness/illness patterns, and basic nursing skills. Upon completion, students should be able to demonstrate beginning understanding of nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span.

NUR 102 Practical Nursing II 8 0 12   12

Prerequisites: None Corequisites: None

This course includes more advanced concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, delegation, cost effectiveness, legal/ethical/professional issues, and wellness/illness patterns. Upon completion, students should be able to begin participating in

the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span.

NUR 103 Practical Nursing III 6 0 12   10

Prerequisites: None Corequisites: None

This course focuses on use of nursing/related concepts by practical nurses as providers of care/members of discipline in collaboration with health team members. Emphasis is placed on the nursing process, wellness/illness patterns, entry-level issues, accountability, advocacy, professional development, evolving technology, and changing health care delivery systems. Upon completion, students should be able to use the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span.

NUR 110 Nursing I   5 3 6 8

Prerequisites: Admission to the Associate Degree Nursing program Corequisites: None

This course introduces concepts basic to beginning nursing practice. Emphasis is placed on introducing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations in health.

NUR 120 Nursing II   5 3 6 8

Prerequisites: NUR 110 Corequisites:None

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on developing the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to participate in the delivery of nursing care for individuals with common alterations in health.

NUR 130 Nursing III   4 3 6 7

Prerequisites: NUR 120 Corequisites: None

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on expanding the nurse's role as provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to deliver nursing care to individuals with common alterations in health.

NUR 210 Nursing IV   5   3   12   10

Prerequisites: NUR 130 Corequisites: None

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on using collaboration as a provider of care, manager of care, and member of the discipline of nursing. Upon completion, students should be able to modify nursing care for individuals with common alterations in health.

NUR 220   Nursing V   4   3   15   10

Prerequisites: NUR 210   Corequisites: None

This course provides an expanded knowledge base for delivering nursing care to individuals of various ages. Emphasis is placed on the nurse's role as an independent provider and manager of care for a group of individuals and member of a multidisciplinary team. Upon completion, students should be able to provide comprehensive nursing care to a group of individuals with common complex health alterations.

NUR 244   Issues and Trends   2   0   0   2

Prerequisites: None   Corequisites: None

This course presents an overview of current trends and issues in nursing as they affect nursing practice in a changing health care environment. Emphasis is placed on making an effective transition into the roles of the practicing nurse. Upon completion, students should be able to articulate professional aspects of the practice of nursing.

OFFICE SYSTEMS TECHNOLOGY

OST 131   Keyboarding   1   2   2

Prerequisites: None   Corequisites: None

This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

OST 134   Text Entry & Formatting 3   2   4

Prerequisites: OST 131   Corequisites: None

This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents.

OST 135   Adv Text Entry & Format 3   2   4

Prerequisites: OST 134   Corequisites: None

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and newsletters. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

OST 136   Word Processing   1   2   2

Prerequisites: OST 131 and permission of instructor   Corequisites: None

This course introduces word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized

software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

OST 162   Executive Terminology   3   0   3

Prerequisites: None   Corequisites: None

This course is designed to increase and improve proficiency in word usage. Topics include root words, prefixes, suffixes, homonyms, synonyms, and specialized vocabularies. Upon completion, students should be able to use acquired vocabulary skills in the global workplace.

OST 164   Text Editing Applications 3   0   3

Prerequisites: OST 131, ENG 111 and ENG 111A   Corequisites: None

This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

OST 223   Machine Transcription I 1   2   2

Prerequisites: OST 134, OST 136, and OST 164

Corequisites: None

This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy.

OST 224   Machine Transcription II 1   2   2

Prerequisites: OST 223   Corequisites: None

This course provides advanced transcription skills. Emphasis is placed on specialized transcription features. Upon completion, students should be able to transcribe complex business documents into mailable copy with minimal assistance.

OST 236   Adv Word/Information Proc 2   2   3

Prerequisites: OST 136 and OST 131 and

permission of instructor   Corequisites: None

This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents.

OST 289   Office Systems Management 2   2   3

Prerequisites: OST 134, OST 136, and OST 164

Corequisites: None

This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment

utilization. Upon completion, students should be able to function proficiently in a changing office environment.

PHYSICAL EDUCATION

PED 110   Fit and Well for Life   1 2 2

Prerequisites: None   Corequisites: None

This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests.

PED 113   Aerobics I   0 3 1

Prerequisites: None   Corequisites: None

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.

PED 117   Weight Training I   0 3 1

Prerequisites: None   Corequisites:None

This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.

PED 118   Weight Training II   0 3 1

Prerequisites: PED 117   Corequisites: None

This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program.

PED 127   Karate   0 3 1

Prerequisites: None   Corequisites: None

This course introduces the martial arts using the Japanese Shotokan form. Topics include proper conditioning exercise, book control, proper terminology, historical foundations, and etiquette relating to karate. Upon completion, students should be able to perform line drill techniques and Kata for various ranks.

PED 128   Golf-Beginning   0 2 1

Prerequisites: None   Corequisites: None

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game,

putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf.

PED 130   Tennis-Beginning   0 2 1

Prerequisites: None   Corequisites: None

This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis.

PED 132   Racquetball-Beginning   0 2 1

Prerequisites: None   Corequisites: None

This course introduces the fundamentals of racquetball. Emphasis is placed on rules, fundamentals, and strategies of beginning racquetball. Upon completion, students should be able to play recreational racquetball.

PED 139   Bowling-Beginning   0 2 1

Prerequisites: None   Corequisites: None

This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling.

PED 140   Bowling-Intermediate   0 2 1

Prerequisites: PED 139

Corequisites: None

This course covers more advanced bowling techniques. Emphasis is placed on refining basic skills and performing advanced shots, spins, pace, and strategy. Upon completion, students should be able to participate in competitive bowling.

PED 143   Volleyball-Beginning   0 2 1

Prerequisites: None   Corequisites: None

This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball.

PED 144   Volleyball-Intermediate   0 2 1

Prerequisites: PED 143   Corequisites: None

This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball.

PED 145   Basketball-Beginning   0 2 1

Prerequisites: None   Corequisites: None

This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic

game strategy. Upon completion, students should be able to participate in recreational basketball.

PED 146   Basketball-Intermediate   0 2 1

Prerequisites: PED 145 Corequisites: None

This course covers more advanced basketball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to play basketball at a competitive level.

PED 152   Swimming-Beginning   0 2 1

Prerequisites: None Corequisites: None

This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning elementary strokes. Upon completion, students should be able to demonstrate safety skills and be able to tread water, back float, and use the crawl stroke for 20 yards.

PED 240   Advanced PE Skills   0 2 1

Prerequisites: Demonstrated advanced skills in the specific area of physical education

Corequisites: None

This course provides those who have mastered skills in a particular physical education area the opportunity to assist with instruction. Emphasis is placed on methods of instruction, class organization, and progressive skill development. Upon completion, students should be able to design, develop, and implement a unit lesson plan for a skill they have mastered.

PHILOSOPHY

PHI 215*   Philosophical Issues   3 0 3

Prerequisites: ENG 111 Corequisites: None

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue.

PHI 240*   Introduction to Ethics   3 0 3

Prerequisites: ENG 111 Corequisites: None

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice.

PHYSICS

PHY 102   Fundamentals of Physics II   3 2 4

Prerequisites: None Corequisites: None

This course introduces fundamental physical concepts with emphasis on applications. Topics include systems of units, problem-solving methods, graphical analysis, electrostatics, AC and DC circuits, magnetism, transformers, AC and DC motors, and generators. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied to their specific programs.

PHY 110*   Conceptual Physics   3 0 3

Prerequisites: None Corequisites: None

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied.

PHY 121   Applied Physics I   3 2 4

Prerequisites: None Corequisites: None

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

PHY 122   Applied Physics II   3 2 4

Prerequisites: None Corequisites: None

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Emphasis is placed on systems of units, problem-solving methods, graphical analysis, static electricity, AC and DC circuits, magnetism, transformers, AC and DC motors, and generators. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

PHY 125   Health Sciences Physics   3 2 4

Prerequisites: None Corequisites: None

This course introduces fundamental physical principles as they apply to health technologies. Topics include motion, force, work, power, simple machines, and other topics as required by the students' area of study. Upon completion, students should be able to demonstrate an understanding of the fundamental principles covered as they relate to practical applications in the health sciences.

PHY 131   Physics-Mechanics   3 2 4

Prerequisites: MAT 121 or MAT 161

Corequisites: None

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

PHY 132   Physics-Elec & Magnetism   3 2 4

Prerequisites: PHY 131   Corequisites: None

This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, waves, electricity, magnetism, circuits, transformers, motors, and generators. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

PHY 133   Physics-Sound & Light   3 2 4

Prerequisites: PHY 131   Corequisites: None

This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, wave motion, sound, light, and modern physics. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

PHY 151*   College Physics I   3 2 4

Prerequisites: MAT 162, MAT 172, or MAT 175

Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

PHY 152*   College Physics II   3 2 4

Prerequisites: PHY 151   Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students

should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

PHY 251*   General Physics I   3 3 4

Prerequisites: MAT 271   Corequisites: MAT 272

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

PHY 252*   General Physics II   3 3 4

Prerequisites: MAT 272 and PHY 251

Corequisites: None

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

PLUMBING

PLU 110   Modern Plumbing   4 15 9

Prerequisites: None   Corequisites: None

This course introduces the tools, equipment, and materials associated with the plumbing industry. Topics include safety, use and care of tools, recognition and assembly of fittings and pipes, and other related topics. Upon completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

PLU 120   Plumbing Applications   4 15 9

Prerequisites: None   Corequisites: None

This course covers general plumbing layout, fixtures, and water heaters. Topics include drainage, waste and vent pipes, water service and distribution, fixture installation, water heaters, and other related topics. Upon completion, students should be able to safely install common fixtures and systems in compliance with state and local building codes.

PLU 130   Plumbing Systems   3 9 6

Prerequisites: None   Corequisites: None

This course covers the maintenance and repair of plumbing lines and fixtures. Emphasis is placed on identifying and diagnosing problems related to water, drain and vent lines, water heaters, and

plumbing fixtures. Upon completion, students should be able to identify and diagnose needed repairs to the plumbing system.

PLU 140   Intro to Plumbing Codes   1 2 2

Prerequisites: None   Corequisites: None

This course covers plumbing industry codes and regulations. Emphasis is placed on North Carolina regulations and the minimum requirements for plumbing materials and design. Upon completion, students should be able to research and interpret North Carolina plumbing codes.

PLU 150   Plumbing Diagrams   1 2 2

Prerequisites: None   Corequisites: None

This course introduces sketching diagrams and interpretation of blueprints applicable to the plumbing trades. Emphasis is placed on plumbing plans for domestic and/or commercial buildings. Upon completion, students should be able to sketch plumbing diagrams applicable to the plumbing trades.

POLITICAL SCIENCE

POL 120*   American Government   3 0 3

Prerequisites: None   Corequisites: None

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system.

POL 130   State & Local Government   3 0 3

Prerequisites: None   Corequisites: None

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual.

PRINTING

PRN 221   Offset Press Operations   1 4 3

Prerequisites: None   Corequisites: None

This course covers advanced lithographic theory and provides extensive hands-on operating experience. Emphasis is placed on make-ready, press operation, maintenance, and troubleshooting of multi-color jobs on sheet-fed offset presses and duplicators. Upon completion, students should be able to set up, run, maintain,

and produce commercial-quality multi-color work.

PRN 240   Print Estimating/Planning 3 0 3

Prerequisites: GRA 121   Corequisites: None

This course covers printing economics, development of cost centers, job flow throughout departments, and material and labor costs. Topics include budgeted, hourly, cost-rate derivation; production standards and data; and analysis of other estimating procedures including computer-assisted estimating. Upon completion, students should be able to demonstrate an understanding of economic factors of the printing industry and determine all production costs of printed jobs.

PSYCHOLOGY

PSY 141   Psych of Death and Dying 3 0 3

Prerequisites: None   Corequisites: None

This course presents psychological perspectives on death and dying. Topics include the culturally diverse aspects of death and the grieving process, adjustment mechanisms, interventions, and the psychological and ethical dimensions of death and dying. Upon completion, students should be able to demonstrate an understanding of the psychosocial aspects of death and dying. This course is restricted to students enrolled in the Funeral Service Education Curriculum.

PSY 150*   General Psychology   3 0 3

Prerequisites: None   Corequisites: None

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course will also include a specific emphasis upon materials related to the developmental life span.

PSY 241*   Developmental Psych   3 0 3

Prerequisites: PSY 150   Corequisites: None

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span.

PSY 255   Intro to Exceptionality   3 0 3

Prerequisites: PSY 150   Corequisites:None

This course introduces the psychology of the exceptional person. Topics include theoretical perspectives, terminology, and interventions pertaining to various handicapping conditions as

well as the resulting psychosocial adjustments. Upon completion, students should be able to demonstrate a basic understanding of the potentials and limitations of the exceptional person.

PSY 265   Behavioral Modification   3 0 3

Prerequisites: PSY 150 Corequisites: None

This course is an applied study of factors influencing human behavior and strategies for behavioral change. Emphasis is placed on cognitive-behavioral theory, behavioral assessment, practical applications of conditioning techniques, and maintenance of adaptive behavior patterns. Upon completion, students should be able to implement basic learning principles to effect behavioral changes in self and others.

PSY 281*   Abnormal Psychology   3 0 3

Prerequisites: PSY 150 Corequisites:None

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques.

RADIOGRAPHY

RAD 110   Rad Intro & Patient Care 2 3 0 3

Prerequisites: Enrollment in the Radiography program Corequisites: RAD 111 and RAD 151

This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

RAD 111   RAD Procedures I   3 3 0 4

Prerequisites: Enrollment in the Radiography program Corequisites: RAD 110 and RAD 151

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas.

RAD 112   RAD Procedures II   3 3 0 4

Prerequisites: RAD 110, RAD 111, and RAD 151 Corequisites: None

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, bony thorax, and gastrointestinal,

biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.

RAD 121   Radiographic Imaging I   2 3 0 3

Prerequisites: RAD 110, RAD 111, and RAD 151   Corequisites: None

This course covers factors of image quality and methods of exposure control. Topics include density, contrast, recorded detail, distortion, technique charts, manual and automatic exposure control, and tube rating charts. Upon completion, students should be able to demonstrate an understanding of exposure control and the effects of exposure factors on image quality.

RAD 122   Radiographic Imaging II 1 3 0 2

Prerequisites: RAD 112, RAD 121, and RAD 161   Corequisites: RAD 131 and RAD 171

This course covers image receptor systems and processing principles. Topics include film, film storage, processing, intensifying screens, grids, and beam limitation. Upon completion, students should be able to demonstrate the principles of selection and usage of imaging accessories to produce quality images.

RAD 131   Radiographic Physics I   1 3 0 2

Prerequisites: RAD 112, RAD 121, and RAD 161   Corequisites: RAD 122 and RAD 171

This course introduces the fundamental principles of physics that underlie diagnostic X-ray production and radiography. Topics include electromagnetic waves, electricity and magnetism, electrical energy, and power and circuits as they relate to radiography. Upon completion, students should be able to demonstrate an understanding of basic principles of physics as they relate to the operation of radiographic equipment.

RAD 151   RAD Clinical Ed I   0 0 6 2

Prerequisites: Enrollment in the Radiography program   Corequisites: RAD 110 and RAD 111

This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 161   RAD Clinical Ed II   0 0 15 5

Prerequisites: RAD 110, RAD 111, and RAD 151   Corequisites: RAD 112 and RAD 121

This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to

meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 171   RAD Clinical Ed III   0 0 12 4

Prerequisites: RAD 112, RAD 121, and RAD 161   Corequisites: RAD 122 and RAD 131

This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 211   RAD Procedures III   2 3 0 3

Prerequisites: RAD 122   Corequisites:RAD 231, RAD 241, and RAD 251

This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, pathology, and advanced imaging. Upon completion, students should be able to demonstrate competence in these areas.

RAD 231   Radiographic Physics II   1 3 0 2

Prerequisites: RAD 171   Corequisites:RAD 211, RAD 241, and RAD 251

This course continues the study of physics that underlie diagnostic X-ray production and radiographic and fluoroscopic equipment. Topics include X-ray production, electromagnetic interactions with matter, X-ray devices, equipment circuitry, targets, filtration, and dosimetry. Upon completion, students should be able to demonstrate an understanding of the application of physical concepts as related to image production.

RAD 241   Radiation Protection   2 0 0 2

Prerequisites: RAD 122, RAD 131, and RAD 171   Corequisites: RAD 211, RAD 231, and RAD 251

This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.

RAD 245   Radiographic Analysis   2 3 0 3

Prerequisites: RAD 251   Corequisites: RAD 261

This course provides an overview of imaging concepts and introduces methods of quality assurance. Topics include a systematic approach for image evaluation and analysis of imaging service and quality assurance. Upon completion,

students should be able to establish and administer a quality assurance program and conduct a critical review of images.

RAD 251   RAD Clinical Ed IV   0 0 21 7

Prerequisites: RAD 122, RAD 131, and RAD 171   Corequisites: RAD 211, RAD 231, and RAD 241

This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 261   RAD Clinical Ed V   0 0 21 7

Prerequisites: RAD 251   Corequisites:RAD 245

This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD 282   RAD Clinical Elective   0 0 6 2

Prerequisites: Enrollment in the Radiography program   Corequisites: None

This course provides advanced knowledge of clinical applications. Emphasis is placed on enhancing clinical skills. Upon completion, students should be able to successfully complete the clinical course objectives.

RESPIRATORY CARE

RCP 110   Intro to Respiratory Care 3 3 0 4

Prerequisites: Enrollment in the Respiratory Care program   Corequisites: None

This course introduces the respiratory care profession. Topics include the role of the respiratory care practitioner, medical gas administration, basic patient assessment, infection control, and medical terminology. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

RCP 111   Therapeutics/Diagnostics 4 3 0 5

Prerequisites: RCP 110   Corequisites:None

This course is a continuation of RCP 110. Emphasis is placed on entry-level therapeutic and diagnostic procedures used in respiratory care. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

RCP 112   Patient Management   3 3 0 4

Prerequisites: RCP 111 Corequisites: None

This course provides entry-level skills in adult/pediatric mechanical ventilation and respiratory care procedures in traditional and alternative settings. Emphasis is placed on therapeutic modalities and physiological effects of cardiopulmonary rehabilitation, home care, mechanical ventilation, and monitoring. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

RCP 113   RCP Pharmacology   2 0 0 2

Prerequisites: Enrollment in the Respiratory Care program   Corequisites: None

This course covers the drugs used in the treatment of cardiopulmonary diseases. Emphasis is placed on the uses, actions, indications, administration, and hazards of pharmacological agents. Upon completion, students should be able to demonstrate competence though written evaluations.

RCP 114 C-P Anatomy & Physiology 3 0 0 3

Prerequisites: BIO 163 Corequisites: None

This course provides a concentrated study of cardiopulmonary anatomy and physiology essential to the practice of respiratory care. Emphasis is placed on cardiovascular and pulmonary physiology, acid/base balance, and blood gas interpretation. Upon completion, students should be able to demonstrate competence in these concepts through written evaluation.

RCP 115   C-P Pathophysiology   2 0 0 2

Prerequisites: BIO 163 Corequisites: None

This course introduces the etiology, pathogenesis, and physiology of cardiopulmonary diseases and disorders. Emphasis is placed on clinical signs and symptoms along with diagnoses, complications, prognoses, and management. Upon completion, students should be able to demonstrate competence in these concepts through written evaluations.

RCP 122   Special Practice Lab   0 2 0 1

Prerequisites: Enrollment in the Respiratory Care program   Corequisites: None

This course provides additional laboratory learning opportunities in respiratory care. Emphasis is placed on therapeutic procedures and equipment management. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations.

RCP 123   Special Practice Lab   0 3 0 1

Prerequisites: Enrollment in the Respiratory Care program   Corequisites: None

This course provides additional laboratory learning opportunities in respiratory care. Emphasis is placed on therapeutic procedures and equipment management. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations.

RCP 132   RCP Clinical Practice I   0 0 6 2

Prerequisites: Enrollment in the Respiratory Care program   Corequisites: RCP 110

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

RCP 145   RCP Clinical Practice II   0 0 15 5

Prerequisites: RCP 110 Corequisites: RCP 111

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

RCP 153   RCP Clinical Practice III 0 0 9 3

Prerequisites: RCP 111   Corequisites: None

This course provides entry-level clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

RCP 210   Critical Care Concepts   3 3 0 4

Prerequisites: Successful completion of three semesters of the Respiratory Care program

Corequisites: None

This course provides further refinement of acute patient care and underlying pathophysiology. Topics include a continuation in the study of mechanical ventilation, underlying pathophysiology, and introduction of critical care monitoring. Upon completion, students should be able to demonstrate competence in concepts and procedures through written and laboratory evaluations.

RCP 211 Adv Monitoring/Procedures 3 3 0 4

Prerequisites: RCP 210 Corequisites: None

This course includes advanced information gathering and decision making for the respiratory care professional. Topics include advanced cardiac monitoring and special procedures. Upon completion, students should be able to evaluate, design, and recommend appropriate care plans through written and laboratory evaluations.

RCP 214   Neonatal/Ped's RC   1 3 0 2

Prerequisites: RCP 111 Corequisites: None

This course provides in-depth coverage of the concepts of neonatal and pediatric respiratory care. Emphasis is placed on neonatal and

pediatric pathophysiology and on the special therapeutic needs of neonates and children. Upon completion, students should be able to demonstrate competence in these concepts through written and laboratory evaluations.

RCP 215   Career Prep-Adv Level   0 3 0 1

Prerequisites: Enrollment in the Respiratory Care program   Corequisites: None

This course provides preparation for employment and the advanced-level practitioner credentialing exam. Emphasis is placed on review of the NBRC Advanced-Level Practitioner Exam and supervision and management. Upon completion, students should be able to successfully complete the appropriate self-assessment examinations and meet the requirements for employment.

RCP 222   Special Practice Lab   0 2 0 1

Prerequisites: Enrollment in the Respiratory Care program   Corequisites: None

This course provides additional laboratory learning opportunities in respiratory care. Emphasis is placed on therapeutic procedures and equipment management. Upon completion, students should be able to demonstrate competence in concepts and procedures through laboratory evaluations.

RCP 236   RCP Clinical Practice IV 0 0 18 6

Prerequisites: RCP 111   Corequisites:RCP 210

This course provides advanced practitioner clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

RCP 247   RCP Clinical Practice V   0 0 21 7

Prerequisites: RCP 210   Corequisites:RCP 211

This course provides advanced practitioner clinical experience. Emphasis is placed on therapeutic and diagnostic patient care. Upon completion, students should be able to demonstrate clinical competence in required performance evaluations.

REAL ESTATE APPRAISAL

REA 101   Intro Real Est App R-1   2 0 2

Prerequisites: None   Corequisites: None

This course introduces the entire valuation process, with specific coverage of residential neighborhood and property analysis. Topics include basic real property law, concepts of value and operation of real estate markets, mathematical and statistical concepts, finance, and residential construction/design. Upon completion, students should be able to demonstrate adequate preparation for REA 102.

REA 102   Valuation Prin & Prac R-2   2 0 2

Prerequisites: REA 101   Corequisites: None

This course introduces procedures used to develop an estimate of value and how the various principles of value relate to the application of such procedures. Topics include the sales comparison approach, site valuation, sales comparison, the cost approach, the income approach, and reconciliation. Upon completion, students should be able to complete the Uniform Residential Appraisal Report (URAR).

REA 103   Applied Res Prop Val R-3   2 0 2

Prerequisites: REA 102   Corequisites: None

This course covers the laws and standards practiced by appraisers in the appraisal of residential 1-4 unit properties and small farms. Topics include Financial Institutions Reform and Recovery Enforcement Act (FIRREA), Uniform Standards of Professional Appraisal Practice (USPAP), and North Carolina statutes and rules. Upon completion, students should be able to demonstrate eligibility to sit for the NC Appraisal Board license trainee examination and to enroll in REA 201.

REA 201   Intro Income Prop App G-1 2 0 2

Prerequisites: REA 103 Corequisites: None

This course introduces concepts and techniques used to appraise real estate income properties. Topics include real estate market analysis, property analysis and site valuation, how to use financial calculators, present value, NOI, and before-tax cash flow. Upon completion, students should be able to estimate income property values using direct capitalization and to sit for the NC Certified Residential Appraiser examination.

REA 202   Adv Inc Capital Proc G-2   2 0 2

Prerequisites: REA 201

Corequisites: A financial calculator is required for this course

This course expands direct capitalization techniques and introduces yield capitalization. Topics include yield rates, discounted cash flow, financial leverage, and traditional yield capitalization formulas. Upon completion, students should be able to estimate the value of income producing property using yield capitalization techniques.

REA 203   Applied Inc Prop Val G-3 2 0 2

Prerequisites: REA 202   Corequisites: None

This course covers the laws, rules, and standards pertaining to the principles and practices applicable to the appraisal of income properties. Topics include FIRREA, USPAP, Uniform Commercial and Industrial Appraisal Report (UCIAR) form, North Carolina statutes and rules, and case studies. Upon completion, students should be able to prepare a narrative report that conforms to the USPAP and sit for the NC Certified General Appraisal examination.

READING

RED 070   Essential Reading Skills   3 2 4

Prerequisites: None   Corequisites: None

This course is designed for those with limited reading skills. Emphasis is placed on basic word attack skills, vocabulary, transitional words, paragraph organization, basic comprehension skills, and learning strategies. Upon completion, students should be able to demonstrate competence in the skills required for RED 080.

RED 080   Intro to College Reading   3 2 4

Prerequisites: RED 070 or ENG 075

Corequisites: None

This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context.

RED 090   Improved College Reading   3 2 4

Prerequisites: RED 080 or ENG 085

Corequisites: None

This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material.

REAL ESTATE

RLS 112   Real Estate Fundamentals   4 0 4

Prerequisites: None   Corequisites: None

This course provides basic instruction in real estate principles and practices. Topics include law, finance, brokerage, closing, valuation, management, taxation, mathematics, construction, land use, property insurance, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate basic knowledge and skills necessary for real estate sales.

RLS 113   Real Estate Mathematics   2 0 2

Prerequisites: None   Corequisites: None

This course provides basic instruction in business mathematics applicable to real estate situations. Topics include area computations, percentage of profit/loss, bookkeeping and accounting methods, appreciation and depreciation, financial calculations and interest yields, property valuation, insurance, taxes, and commissions. Upon completion, students should be able to demonstrate proficiency in applied real estate mathematics.

RLS 114   Real Estate Brokerage   2 0 2

Prerequisites: RLS 112 or current Real Estate license   Corequisites: None

This course provides basic instruction in the various real estate brokerage operations, including trust account records and procedures. Topics include establishing a brokerage firm, management concepts and practices, personnel and training, property management, advertising and publicity, records and bookkeeping systems, and financial operations. Upon completion, students should be able to establish, operate, and manage a realty brokerage practice in a manner which protects and serves the public interest.

RLS 115   Real Estate Finance   2 0 2

Prerequisites: RLS 112 or current Real Estate license   Corequisites: None

This course provides advanced instruction in financing real estate transactions and real property valuation. Topics include sources of mortgage funds, financing instruments, mortgage types, loan underwriting, essential mathematics, and property valuation. Upon completion, students should be able to demonstrate knowledge of real estate finance necessary to act as real estate brokers.

RLS 116   Real Estate Law   2 0 2

Prerequisites: RLS 112 or current Real Estate license   Corequisites: None

This course provides advanced instruction in legal aspects of real estate brokerage. Topics include property ownership and interests, brokerage relationships, agency law, contracts, settlement statements, and NC License Law and Commission Rules. Upon completion, students should be able to demonstrate knowledge of laws relating to real estate brokerage necessary to act as real estate brokers.

RADIATION THERAPY TECHNOLOGY

RTT 121   Special Imaging   2 0 2

Prerequisites: RAD 121 and RTT 151

Corequisites: RTT 161

This course introduces special imaging modalities including computed tomography and magnetic resonance imaging. Emphasis is placed on the comparison of computed tomography and magnetic resonance imaging for the visualization of various neoplasms. Upon completion, students should be able to demonstrate proper utilization of special imaging modalities relative to radiation treatment planning.

RTT 151   RTT Clinical Ed II   0 0 9 3

Prerequisites: RAD 110, RAD 111, and RAD 151   Corequisites: RAD 121

This course provides additional experience in patient management and in the more complex radiographic procedures. Emphasis is placed on

mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RTT 161   RTT Clinical Ed III   0 0 6 2

Prerequisites: RAD 121 and RTT 151

Corequisites: RTT 121

This course provides the opportunity to become proficient in basic procedures and gain experience in advanced areas. Emphasis is placed on special imaging areas to include computed tomography and magnetic resonance imaging with an introduction to radiation therapy. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RTT 210   Radiobiology   2 0 0 2

Prerequisites: RTT 161 Corequisites: RTT 220, RTT 221, RTT 230 or 233, and RTT 238 or 240

This course focuses on the biological effects of ionizing radiation, tissue sensitivity, and tissue response to radiation. Emphasis is placed on methods of radiation protection applicable to tumor localization and treatment delivery. Upon completion, students should be able to demonstrate an understanding of the effects of ionizing radiation on the body.

RTT 220   Rad Therapy Orientation 2 0 0 2

Prerequisites: RTT 161,   Corequisites:RTT 210, RTT 221, RTT 230 or 233, and RTT 238 or 240

This course introduces the operations of radiation therapy departments. Emphasis is placed on patient care in the clinical setting, familiarization with therapy equipment, and the role of the radiation therapist. Upon completion, students should be able to demonstrate an understanding of the roles of a radiation therapist.

RTT 221   Clinical Oncology I   2 0 0 2

Prerequisites: RTT 161   Corequisites: RTT210, RTT 220, RTT 230 or 233, and RTT 238 or 240

This course introduces the principles of carcinogenesis and neoplasia. Emphasis is placed on cancer development in relation to specific anatomical sites. Upon completion, students should be able to recognize factors related to cancer development and state treatment options for each anatomical site included.

RTT 222   Clinical Oncology II   2 0 0 2

Prerequisites: RTT 238 or RTT 240

Corequisites: BIO 271 and RTT 231, RTT 239, 241, 243, or 244

This course continues the study of neoplasia in relation to specific anatomical systems. Emphasis is placed on cancer development in relation to specific anatomical sites. Upon completion, students should be able to recognize

factors related to cancer development and state treatment options for each anatomical site included.

RTT 230   Rad Therapy Physics   ·3 0 0 3

Prerequisites: RTT 121 Corequisites: RTT 210, RTT 220, RTT 221, and RTT 238 or 240

This course provides a study of the interaction of radiation with matter. Emphasis is placed on atomic interactions and dose measurement techniques. Upon completion, students should be able to demonstrate a knowledge of radiation interactions and dose measurement procedures as they apply to radiation safety.

RTT 231   Dosimetry   3 0 0 3

Prerequisites: RTT 238 or RTT 240

Corequisites: RTT 222 and RTT 239, 241, 243, or 244

This course is a study of clinical dosimetry and treatment planning. Emphasis is placed on treatment planning techniques and beam arrangements. Upon completion, students should be able to demonstrate a knowledge of dosimetry procedures used to treat various neoplasms.

RTT 232   Rad Therapy Procedures 2 0 0 2

Prerequisites: RTT 222, RTT 231 or 234, and RTT 239, 241, 243, or 244 Corequisites: RTT246

This course covers routine and new techniques in simulation and treatment procedures. Emphasis is placed on treatment choices relative to the tumor site and modality selected. Upon completion, students should be able to demonstrate an understanding of basic and advanced treatment procedures.

RTT 238   RTT Clinical Ed IV   0 2 15 6

Prerequisites: RTT 161 Corequisites: RTT 210, RTT 220, RTT 221, and RTT 230 or 233

This course provides clinical experience in the use of equipment and patient positioning in both simulation and delivery of radiation therapy treatments. Emphasis is placed on the varied aspects of the radiation therapy department and patient progression through evaluation, treatment, and follow-up. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RTT 239   RTT Clinical Ed V   0 2 18 7

Prerequisites: RTT 210, RTT 220, RTT 221, and RTT 230 or 233

Corequisites: RTT 222 and RTT 231 or 234

This course provides additional experience in patient management. Emphasis is placed on the development and refinement of technical skills within the radiation therapy department. Upon completion, students should be able to demonstrate successful completion of objectives.

RTT 246   RTT Clinical Ed VI   0 0 18 6

Prerequisites: RTT 239, 241, 243, or 244

Corequisites: RTT 232

This course promotes clinical practice on a more independent level of performance. Emphasis is placed on the utilization of equipment, patient care techniques, and treatment considerations for more complicated radiation therapy procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

SPEECH-LANGUAGE PATHOLOGY ASSISTING

SLP 111   Intro to Sp-Lan Patho   3 0 0 3

Prerequisites: None   Corequisites: None

This course provides an overview of the theory, practice, and philosophy of speech-language pathology assisting. Topics include legal and ethical issues, scope of practice, multiculturalism, and diversity. Upon completion, students should be able to describe characteristics of the profession and identify components of safe and ethical practice.

SLP 112 SLP Anatomy & Physiology 3 0 0 3

Prerequisites: BIO 163, BIO 166, or BIO 169

Corequisites: None

This course introduces the basic pathophysiology of the orofacial and thoracic structures of the human body. Emphasis is placed on the most commonly treated speech, language, and hearing disorders. Upon completion, students should be able to identify and describe basic pathophysiology related to the production of speech and hearing.

SLP 120   SLP Admin Office Proc   2 0 0 2

Prerequisites: Enrollment in the SLP program

Corequisites: None

This course covers organizational and functional skills appropriate to the speech-language pathology workplace. Emphasis is placed on scheduling, office etiquette, operation of office equipment, time management, and quality issues. Upon completion, students should be able to demonstrate correct operation of office equipment and work cooperatively and effectively within the speech-language pathology professional environment.

SLP 130 Phonetics/Speech Patterns   2 2 0 3

Prerequisites: Enrollment in the SLP program

Corequisites: None

This course introduces the International Phonetic Alphabet and the categories of speech sounds, including voice, place, and manner of production. Emphasis is placed on the accurate transcription of normal and abnormal speech samples using the IPA and on the production of effective natural speech. Upon completion, students should be able to transcribe and categorize speech sounds and produce natural speech using appropriate breathing, articulation, and pronunciation.

SLP 140   Normal Communication 3 0 0 3

Prerequisites: Enrollment in the SLP program

Corequisites: None

This course introduces normal verbal and non-verbal communications across the life span, including appropriate social interaction with diverse populations. Topics include normal speech, language, and hearing in a multicultural society and an introduction to screening for normality and abnormality. Upon completion, students should be able to identify normal speech, language, and hearing patterns.

SLP 211   Disorders & Treatment I 3 2 0 4

Prerequisites: SLP 111, SLP 112, SLP 130, and

SLP 140   Corequisites: None

This course covers screening for speech, language, and hearing disorders; use of observational checklists; and administration of therapeutic protocols. Emphasis is placed on conditions commonly treated in speech-language pathology. Upon completion, students should be able to accurately administer screening tests and therapeutic protocols and identify characteristics of developmental speech, language, and hearing disorders.

SLP 212   Disorders & Treatment II 3 2 3 5

Prerequisites: SLP 211 Corequisites: None

This course is a continuation of SLP 211 and includes an introduction to clinical settings. Emphasis is placed on acquired conditions commonly treated in speech-language pathology. Upon completion, students should be able to accurately administer screening tests and therapeutic protocols and identify characteristics of acquired speech, language, and hearing disorders.

SLP 220   Assistive Technology   1 2 0 2

Prerequisites: SLP 111, SLP 130, and SLP 140

Corequisites: SLP 211

This course introduces the preparation, use, and maintenance of selected communication equipment in the treatment of respective disorders. Emphasis is placed on the collaborative use of assistive equipment for speech, language, and hearing disorders. Upon completion, students should be able to instruct the patient and caregiver in the use and maintenance of assistive communication equipment.

SLP 230   SLP Fieldwork   0 0 12 4

Prerequisites: SLP 211   Corequisites: SLP 212 and SLP 231

This course provides supervised fieldwork experience in speech-language pathology assisting in a minimum of two diverse sites. Emphasis is placed on the use of written protocols in providing patient care. Upon completion, students should be able to integrate ethical concepts into safe and effective clinical practice.

SLP 231   SLP Fieldwork Seminar   3 0 0 3

Prerequisites: SLP 211

Corequisites: SLP 212 and SLP 230

This course provides an opportunity to discuss fieldwork experiences with peers and faculty. Emphasis is placed on management of clinical problems, conflict resolution, and job seeking and retention skills. Upon completion, students should be able to meet entry-level requirements for speech-language pathology assistants.

SOCIOLOGY

SOC 210* Introduction to Sociology 3 0 3

Prerequisites: None   Corequisites: None

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.

SOC 215   Group Processes   3 0 3

Prerequisites: None   Corequisites: None

This course introduces group processes and dynamics. Emphasis is placed on small group experiences, roles and relationships within groups, communication, cooperation and conflict resolution, and managing diversity within and among groups. Upon completion, students should be able to demonstrate the knowledge and skills essential to analyze group interaction and to work effectively in a group context.

MEDICAL SONOGRAPHY

SON 110   Intro to Sonography   1 3 3 3

Prerequisites: Enrollment in the Medical Sonography or Cardiovascular Sonography

programs   Corequisites: SON 130

This course provides an introduction to medical sonography. Topics include applications, sonographic terminology, history, patient care, ethics, and basic skills. Upon completion, students should be able to define professionalism and sonographic applications and perform basic patient care skills and preliminary scanning techniques.

SON 111   Sonographic Physics   3 3 0 4

Prerequisites: CVS 163 or SON 110

Corequisites: None

This course introduces ultrasound physical principles, bioeffects, and sonographic instrumentation. Topics include sound wave mechanics, transducers, sonographic equipment, Doppler physics, bioeffects, and safety. Upon completion, students should be able to demonstrate knowledge of sound wave mechanics, transducers, sonography equipment, the Doppler effect, bioeffects, and safety.

SON 120   SON Clinical Ed I   0 0 15 5

Prerequisites: SON 110   Corequisites: None

This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 121   SON Clinical Ed II   0 0 15 5

Prerequisites: SON 120   Corequisites: None

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 130   Abdominal Sonography I 2 3 0 3

Prerequisites: Enrollment in the Medical Sonography program   Corequisites: None

This course introduces abdominal and small parts sonography. Emphasis is placed on the sonographic anatomy of the abdomen and small parts with correlated laboratory exercises. Upon completion, students should be able to recognize and acquire basic abdominal and small parts images.

SON 131   Abdominal Sonography II 1 3 0 2

Prerequisites: SON 130   Corequisites: None

This course covers abdominal and small parts pathology recognizable on sonograms. Emphasis is placed on abnormal sonograms of the abdomen and small parts with correlated sonographic cases. Upon completion, students should be able to recognize abnormal pathological processes in the abdomen and on small parts sonographic examinations.

SON 140   Gynecological Sonography 2 0 0 2

Prerequisites: SON 110 or enrollment in the Medical Sonography program

Corequisites: None

This course is designed to relate gynecological anatomy and pathology to sonography. Emphasis is placed on gynecological relational anatomy, endovaginal anatomy, and gynecological pathology. Upon completion, students should be able to recognize normal and abnormal gynecological sonograms.

SON 220   SON Clinical Ed III   0 0 24 8

Prerequisites: SON 121 Corequisites: None

This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 221   SON Clinical Ed IV   0 0 24 8

Prerequisites: SON 220 Corequisites: None

This course provides continued active participation off campus in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON 225   Case Studies   0 3 0 1

Prerequisites: SON 110 Corequisites: None

This course offers the opportunity to present interesting cases found during clinical education. Emphasis is placed on presentation methods which integrate patient history, laboratory results, and sonographic findings with reference to current literature. Upon completion, students should be able to correlate information necessary for complete presentation of case studies.

SON 241   Obstetrical Sonography I 2 0 0 2

Prerequisites: SON 110 or enrollment in the Medical Sonography certificate program Corequisites: None

This course covers normal obstetrical sonography techniques, the normal fetal environment, and abnormal first trimester pregnancy states. Topics include gestational dating, fetal anatomy, uterine environment, and first trimester complications. Upon completion, students should be able to produce gestational sonograms which document age, evaluate the uterine environment, and recognize first trimester complications.

SON 242   Obstetrical Sonography II 2 0 0 2

Prerequisites: SON 241   Corequisites:None

This course covers second and third trimester obstetrical complications and fetal anomalies. Topics include abnormal fetal anatomy and physiology and complications in the uterine environment. Upon completion, students should be able to identify fetal anomalies, fetal distress states, and uterine pathologies.

SON 250   Vascular Sonography   1 3 0 2

Prerequisites: SON 111 Corequisites: None

This course provides an in-depth study of the anatomy and pathology of the vascular system. Topics include peripheral arterial, peripheral venous, and cerebrovascular disease testing. Upon completion, students should be able to

identify normal vascular anatomy and recognize pathology of the vascular system.

SON 272   Advanced Pathology   0 3 0 1

Prerequisites: SON 110 or enrollment in the Medical Sonography program Corequisites:None

This course is designed to concentrate on complex pathological states seen on sonograms. Emphasis is placed on systemic diseases and multi-organ disease states as seen on sonograms. Upon completion, students should be able to research, present, and discuss system diseases presented on sonograms.

SON 274   Neurosonology   2 0 0 2

Prerequisites: SON 110 or enrollment in the Medical Sonography program Corequisites:None

This course covers the applications of sonography in neurology. Topics include neurological problems as documented by sonography. Upon completion, students should be able to demonstrate the techniques for documenting neurological anatomy and pathological conditions as seen on sonograms.

SON 276   Fetal Echocardiography 1 0 0 1

Prerequisites: Enrollment in the Medical Sonography or Cardiovascular Sonography programs   Corequisites: None

This course introduces the normal and abnormal development of the fetal heart with correlation to sonographic evaluation. Emphasis is placed on cardiac anatomy and physiology in the normal fetus as well as cardiac defects. Upon completion, students should be able to identify and evaluate normal and abnormal fetal cardiac structures.

SON 289   Sonographic Topics   2 0 0 2

Prerequisites: SON 220 Corequisites: SON 221

This course provides an overview of sonographic topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to demonstrate a comprehensive knowledge of sonography and be prepared for the registry examinations.

SPANISH

SPA 111*   Elementary Spanish I   3 0 3

Prerequisites: None   Corequisites: None

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness.

SPA 112*   Elementary Spanish II   3 0 3

Prerequisites: SPA 111 Corequisites: None

This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness.

SPA 211* Intermediate Spanish I   3 0 3

Prerequisites: SPA 112   Corequisites: None

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

SPA 212* Intermediate Spanish II   3 0 3

Prerequisites: SPA 211   Corequisites: None

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

WELDING

WLD 110 Cutting Processes   1 3 2

Prerequisites: None   Corequisites: None

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

WLD 112 Basic Welding Processes 1 3 2

Prerequisites: None   Corequisites: None

This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

WLD 115 SMAW (Stick) Plate   2 9 5

Prerequisites: None   Corequisites: None

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

WLD 116 SMAW (Stick) Plate/Pipe 1 9 4

Prerequisites: WLD 115   Corequisites: None

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

WLD 121 GMAW (MIG) FCAW/Plate 2 6 4

Prerequisites: None   Corequisites: None

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

WLD 131 GTAW (TIG) Plate   2 6 4

Prerequisites: None   Corequisites: None

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

WLD 132 GTAW (TIG) Plate/Pipe 1 6 3

Prerequisites: WLD 131

Corequisites: None

This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry.

WLD 141 Symbols & Specifications 2 2 3

Prerequisites: None   Corequisites: None

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

WLD 143 Welding Metallurgy   1 2 2

Prerequisites: None   Corequisites: None

This course introduces the concepts of welding metallurgy. Emphasis is placed on basic metallurgy, effects of welding on various metals, and metal classification and identification. Upon completion, students should be able to understand basic metallurgy, materials designation, and classification systems used in welding.

WLD 145 Thermoplastic Welding 1 3 2

Prerequisites: None   Corequisites: None

This course introduces the thermoplastic welding processes and materials identification. Topics include filler material selection, identification, joint design, and equipment setup with emphasis on bead types and applications. Upon completion, students should be able to perform fillet and groove welds using thermoplastic materials.

WLD 151 Fabrication I 2 6 4

Prerequisites: WLD 110, WLD 115, WLD 116, and WLD 131   Corequisites: None

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

WLD 215 SMAW (Stick) Pipe 1 9 4

Prerequisites: WLD 115 or WLD 116

Corequisites: None

This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions.

WLD 231 GTAW (TIG) Pipe 1 6 3

Prerequisites: WLD 132   Corequisites:None

This course covers gas tungsten arc welding on pipe. Topics include joint preparation and fit up with emphasis placed on safety, GTAW welding technique, bead application, and joint geometry. Upon completion, students should be able to perform GTAW welds to applicable codes on pipe with prescribed electrodes and filler materials in various pipe positions.

WLD 251 Fabrication II 1 6 3

Prerequisites: WLD 151   Corequisites: None

This course covers advanced fabrication skills. Topics include advanced layout and assembly methods with emphasis on the safe and correct use of fabrication tools and equipment. Upon completion, students should be able to fabricate projects from working drawings.

WLD 261 Certification Practices 1 3 2

Prerequisites: WLD 115, WLD 121, and WLD 131   Corequisites: None

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

WLD 265 Automated Welding/Cutting 2 6 4

Prerequisites: WLD 110 and WLD 121

Corequisites: None

This course introduces automated welding equipment and processes. Topics include setup, programming, and operation of automated welding and cutting equipment. Upon completion, students should be able to set up, program, and operate automated welding and cutting equipment.

The * beside a course number indicates that the course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

Faculty/Staff Directory, Map, & Terms to Know
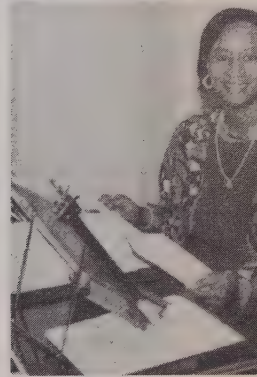
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Dentist/Administrator, Dental Care Plan, Inc.

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AT&T *(Retired)*
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North Carolina

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Dewitt E. Rhoades   *1998*
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Jeffrey R. McFadden   *1999*
Attorney, Coats & Bennett
Joyce E. Glass   *2000*
Registered Nurse, Medical Park Hospital

Appointed by Student Government Association
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Taylor, Tommy L.
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Manager, Bookstore

Young, Martin L.
Groundskeeper

Yurko, Linda W.
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MAIN CAMPUS
2100 Silas Creek Parkway
Winston-Salem, NC
(910) 723-0371
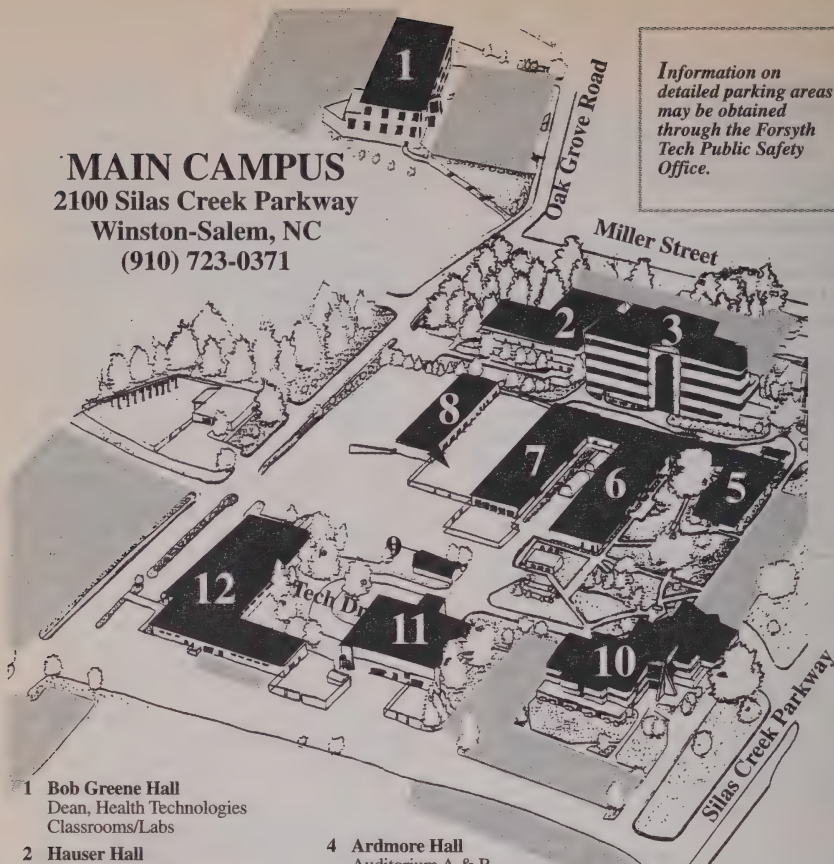
1 Bob Greene Hall
Dean, Health Technologies
Classrooms/Labs

2 Hauser Hall
Dean, Business Technologies
Cafeteria
Classrooms/Labs

3 Allman Center
President's Office
Admissions
Alumni/External Relations
Classrooms
Counseling Center
Dean, Arts and Sciences
Dean, Student
   Development Services
Employment Assistance
Financial Aid
Information Desk
JTPA
Learning Center
Planning and Development
Records
Single Parent/Displaced
   Homemaker

4 Ardmore Hall
Auditorium A & B
Cashier's Office
Classrooms
Library
Personnel Office

5 Parkway Building
Marketing & Publications
Development Department

6 Winston Building
Dean, Engineering
   Technologies
Classrooms

7 Salem Building
Classrooms/Workshops

8 Forsyth Building
Classrooms/Workshops

9 Carolina Annex
Public Safety

10 Snyder Hall
Bookstore
Classrooms
Faculty/Staff Service Center
Student Activities/SGA Office

11 Piedmont Building
Classrooms/Workshops

12 Carolina Building
Classrooms/Workshops
Environmental Services

Parking
Visitor parking is available in front of the Allman Center for approximately 40 cars.
Additional parking is available at Bob Greene Hall or any of the areas shaded in gray.

ALLIED HEALTH
1990 Beach Street
Winston-Salem, NC
(910) 723-0371
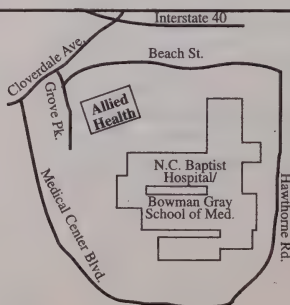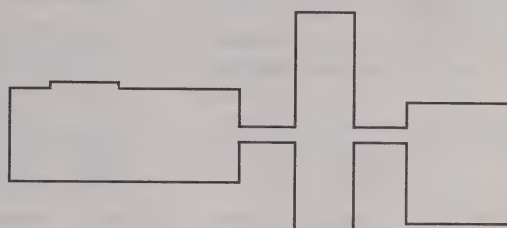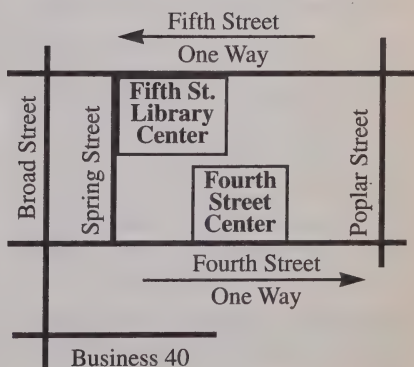
Terms to Know

To help you with words used by Forsyth Tech faculty and staff, here is a list of frequently used terms and their definitions.

Academic standing: Entering students must earn a grade point average (GPA) of 2.0 by the end of their first semester and maintain a GPA of 2.0 thereafter.

Accreditation: Various professional agencies appoint teams of evaluators who periodically study Forsyth Tech's programs and services to ensure that they meet standards of quality and are relevant to the college's purpose.

Adult High School: A program that allows adults to complete high school courses and credits for an Adult High School diploma.

Advisor: A person who approves the selection of courses for your chosen field of study and is usually a faculty member or counselor in the Counseling Center.

Associate in Applied Science: A two-year technical degree that prepares you for the job market.

Associate in Arts: A two-year college transfer program that concentrates on humanities and social sciences for those planning to continue in a bachelor's degree program in a senior college.

Associate in Science: A two-year college transfer program that concentrates on mathematics and physical sciences for those planning to continue in a bachelor's degree program in a senior college.

Audit: A course for which you pay tuition and fees but do not receive credit. An Audit Request Form is available in the Counseling Center or from the appropriate division dean.

Catalog: The publication you can get in the Admission's Office that contains almost everything you need to know about FTCC and its programs.

Certificate: A program of study generally requiring one year or less of course work.

Contact hours: The actual number of hours in class per week, per course.

Corporate and Continuing Education: This division provides noncredit courses for citizens who are 18 years old or older. The opportunities are based on individual need and previous educational achievement.

Credit hours: Every class is worth a value called a credit hour. Every degree, diploma and certificate program requires you to take a certain number of credit hours.

Counselor: A person who provides you with personal, academic, vocational, and career counseling.

Cumulative grade point average (GPA): The average of your grades for all classes taken at FTCC. It is calculated by adding all earned quality points and dividing by the number of credit hours taken.

Curriculum: The program of courses required to receive a degree, diploma or certificate in your chosen area of study.

Developmental Education: This program offers a series of courses for preparation, remediation, and academic guidance if you do not meet the entrance requirements for the curriculum of your choice.

Diploma: Curriculums that usually take 2 semester to complete. Courses are not designed to transfer to a 4-year school.

Division: An academic area within the college. FTCC has five: Arts and Sciences, Business Technologies, Corporate and Continuing Education, Engineering Technologies, and Health Technologies.

Drop/Add: When you adjust your schedule by dropping courses you registered for but no longer wish to take, and/or adding other courses. The Drop/Add period is limited and is indicated on the calendar.

Electives/Unrestricted electives: A course which is not specifically named in your curriculum, but is required to graduate. Check with your academic advisor before choosing an elective.

Financial aid: Grants (monies given to students through the federal and state government), scholarships, and student loans are available to qualified students to help you meet your educational expenses.

Full-time student: A student who is taking a least 12 credit hours. A student who is registered for 11 credit hours or fewer in one quarter is a part-time student.

GED: Persons who have not completed high school may choose to take a series of tests that correspond to most high school curriculums to determine if they qualify for a high school equivalency diploma.

Independent study: A credit course, allowed only in special circumstances, in which you work individually with a faculty member.

Plagiarize: Using ideas or words of another as your own without crediting the source. Plagiarism is a form of cheating.

Practicum: A course that offers hands-on experience in the workplace.

Prerequisites: Preliminary skills, knowledge or other courses which are required before your enrollment in a particular course. Prerequisites are listed by course and course description in the catalog. Descriptions are alphabetized by course prefix.

Probation: You are placed on academic probation when your GPA falls below 2.0.

Proficiency test: You may, under certain conditions, take an exam and receive credit for a course without having taken the course. You will not receive a grade, just the credit hours.

SGA - Student Government Association: You can get involved in SGA activities by contacting the student activities facilitator in the Carolina Annex.

Special credit student: A student who is taking one or more curriculum credit courses, but who is not enrolled in a specific curriculum.

Student activity fee: The fee you pay every quarter that covers activities, (cookouts, dances, etc.) part of graduation expenses, and the student newspaper.

Transcript: A printed record of every course you've taken at FTCC and the grades you've received. An official transcript is stamped with the seal of the college. Transcripts are obtained, at a cost of $2.00, from the Records Office.

Workstudy: A federally supported program through which students, primarily from low-income families, are given preference for part-time employment on campus.

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**YOUR
SUCCESS
is our goal!**

**Forsyth Technical
Community College**
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